

<https://helda.helsinki.fi>

The Mirror in Vedic India : Its ancient use, and its present relevance in dating texts

Parpola, Asko

2019

Parpola , A 2019 , ' The Mirror in Vedic India : Its ancient use, and its present relevance in dating texts ' , Studia Orientalia Electronica , vol. 7 , pp. 1-29 . <https://doi.org/10.23993/store.76275>

<http://hdl.handle.net/10138/308435>
<https://doi.org/10.23993/store.76275>

cc_by
publishedVersion

Downloaded from Helda, University of Helsinki institutional repository.

This is an electronic reprint of the original article.

This reprint may differ from the original in pagination and typographic detail.

Please cite the original version.

THE MIRROR IN VEDIC INDIA: ITS ANCIENT USE AND ITS PRESENT RELEVANCE IN DATING TEXTS

Asko Parpola
University of Helsinki

The major first part of the paper collects as exhaustively as possible all mentions of words for ‘mirror’ occurring in Vedic literature (c. 1200–300 BCE). The occurrences are presented with sufficient context in Sanskrit and English in order to show how and why the mirror was used in Vedic rituals and Vedic culture in general, and what meaning was ascribed to it. The second part of the paper discusses a fact of major significance that emerges from this documentation: in the extensive older Vedic literature of the Saṃhitās, Brāhmaṇas, Āraṇyakas and Śrautasūtras (excepting the late Kātyāyana-Śrautasūtra), there is no reference to the mirror at all. This suggests that the mirror was not known in Vedic India until it was introduced to South Asia by the Persian Empire at the end of the sixth century BCE. The later Vedic literature, starting with the early Upaniṣads and comprising also the Gṛhyasūtras and Kātyāyana-Śrautasūtra, would therefore postdate 500 BCE. In other words, the ‘mirror’ words seem to offer a criterion that for the first time enables a division of the Vedic literature into two clearly separate phases of development. Equally important is the firm historical basis that the mirror provides for dating the transition point.

1. INTRODUCTION: THE OCCURRENCES OF WORDS DENOTING ‘MIRROR’ IN VEDIC TEXTS

As was the case of an earlier essay on the Vedic term *prākāśa-* (Parpola 2018), the prompt to write the present paper came from my Danish colleague Toke Lindegaard Knudsen, who studies ancient Indian mirrors.¹ At the end of September 2018, Toke asked me: “Were mirrors ever used in Vedic rituals?” Shortly thereafter, I sent him in reply the manuscript of this study of references

¹ I thank the editor Dr Albion M. Butters for kindly checking my English and two anonymous peer reviewers of the article, whose constructive comments helped me in its revision.

to ‘mirror’ in Vedic literature, which has been rather ignored in more general studies of ancient Indian mirrors.²

In the first part of this paper, I have endeavoured to cite every occurrence of every word denoting ‘mirror’ in the Vedic literature. Presenting these with sufficient contextual quotations in Sanskrit and English, I have sought to show how and why the mirror was used in Vedic rituals and in Vedic culture in general, and what meaning was ascribed to it. This latter aspect comes to the fore especially in the mantras (ritual formulae) accompanying the use of the mirror.

Charting every occurrence of the words denoting ‘mirror’ in Vedic texts revealed a highly significant fact that has not been previously noticed, or at least not sufficiently emphasized and exploited: there are no references to ‘mirror’ at all in the extensive Saṃhitā and Brāhmaṇa texts, which constitute the earliest part of the Veda. Excluding the Kātyāyana-Śrautasūtra, which is generally recognized to be a rather late text, also the Śrautasūtras form a major textual category that lacks any mention of the mirror. References to the mirror therefore constitute an important new means to fix a *terminus post quem* for “later Vedic texts”, where words meaning ‘mirror’ do exist, starting with the early Upaniṣads and including the Gṛhyasūtras. In the second part of the paper, I argue that the mirror was not known in the realm of Vedic culture until it was introduced by the Persian Empire at the end of the sixth century BCE.

Macdonell and Keith’s *Vedic Index of Names and Subjects* (1912: I, 58) deals with the mirror under the lemma *ā-darśa*, which indeed is almost the only Vedic word for ‘mirror’, stating that it “is a term found only in the Upaniṣads and Āraṇyakas”. To this they give (incomplete) references. While it is true that the word *ādarśa* occurs in the Śāṅkhāyana- and Aitareya-Āraṇyakas, these occurrences actually belong to the Saṃhitāyā Upaniṣad, which has been included (in two recensions) in these texts at the time of their final redaction (see below Section 1.1.2), and to the Kauṣītaki-(Brāhmaṇa-)Upaniṣad, which is similarly included in the Śāṅkhāyana-Āraṇyaka (see below Section 1.1.1). The Āraṇyaka texts form a transition from the Brāhmaṇa texts to the Upaniṣads (see Gonda 1975: 423–432) and thus (with the exceptions just mentioned) still contain no mention of the mirror. The Gṛhyasūtras are left totally unaccounted for by Macdonell and Keith, though the word ‘mirror’ occurs many times in them. Jan Gonda’s *Vedic Ritual: The Non-Solemn Rites* (1980) is the best and most comprehensive study so far of the references to the mirror in the Gṛhyasūtras.³

R.L. Turner’s *Comparative Dictionary of the Indo-Aryan Languages* (1966: 52 no. 1143) misleadingly mentions that Sanskrit *ādarśa*- m. ‘mirror’ occurs already in the Śatapatha-Brāhmaṇa and thus ascribes it to the vocabulary of the older Vedic Brāhmaṇa literature. Turner’s ultimate source is Böhtlingk and Roth’s great Sanskrit dictionary (1855: I, 628), which accurately states “Çat. Br. 14,5,1,9 (= Bṛh.Ār.Up. 2,1,9)”. While following Böhtlingk & Roth, Monier-Williams (1899: 138a) changed this to “ŚBr.; BṛĀrUp.”. The given ŚB reference actu-

2 There is only a fleeting quotation of the ChU and the KBU (without exact references) in the article of Naudou (1966), which surveys the representations of the mirror in ancient Indian art (with 11 illustrations) and literature, with an emphasis on the philosophical texts of Buddhism and Kashmir Śaivism. The mirror is a metaphor of the mind and a simile for the emptiness of all phenomena in the Buddhist tradition (Wayman 1974). The Buddhists have also used the mirror in divination and contemplative exercises, and in some rituals, such as the establishment (*pratiṣṭhā*) of a Buddha or *jñānasattva* in an image or a *stūpa* (Bentor 1995). Passing references to the mirror and its symbolism in India are to be found in many books and articles, but a major monograph on the topic is missing. Papers on the archaeology and manufacture of mirrors are quoted in the second part of the present study.

3 See the page references in Gonda’s index (1980: 492b s.v. ‘mirror’). Occasionally Gonda takes note of references to ‘mirror’ in later Sanskrit texts and religion. Particularly useful is his hint regarding Meyer (1937: III, 321 s.v. Spiegel), who recorded various uses of the mirror in Hindu festivals.

ally denotes only the Bṛhad-Āraṇyaka-Upaniṣad, which is a later text subsequently added to the Śatapatha-Brāhmaṇa as an appendix.

The word *prakāśa-* occurs once with the meaning ‘mirror’ in a later Vedic text (KGS 38,5; see below Section 1.2.9). This word is very common in earlier Vedic texts, yet its meaning there is not ‘mirror’, but ‘shine, lustre, fame’. For example, the phrase *kṣatrasya prakāśa-*, occurring many times in the Pañcaviṃśa-Brāhmaṇa (2,8,2; 3,9,2; 13,4,17; 15,3,31; 19,1,5; 19,17,3), means ‘the lustre of might, fame among the nobility’. It is glossed by the commentator Sāyaṇa as *kṣatrasya kṣatriyajāter prakāśaḥ kīrtiḥ*, and it is paralleled by the phrase *brahma-varcas(a)-*, ‘divine splendour’, which refers to the priest’s ‘pre-eminence in sacred knowledge’.

While *ādarśa-*, the usual term for ‘mirror’ in later Vedic texts, occurs (though only once) in a Brāhmaṇa text (in the proper sense of the word) – namely, in the Taittirīya-Brāhmaṇa –, it does not yet denote ‘mirror’ but is an attribute of ‘fire (altar)’, meaning something like ‘gazeable, visible’. The medieval commentator Sāyaṇa glosses it with *sarvato darśaṇīya-*, meaning ‘visible from everywhere’:

TB 3,12,9,2 ādarśām agnīm cinvānāḥ / pūrve viśvasṛjo ‘mṛtāḥ /
śatām varṣasahasrāṇi / dīkṣitāḥ sattrām āsata //

Building the fire-altar (**as**) **an image** (of Agni, the fire-god), the ancient creators of the universe, the immortal ones, having been initiated (having accomplished the rites of the Dīkṣā), performed a Sattrā (a great Soma sacrifice) for one hundred thousand years. (Transl. Dumont 1951: 673b)

Although the Sāma-Vidhāna is usually called the Sāma-Vidhāna-Brāhmaṇa, despite its name it is not a proper Brāhmaṇa text but belongs to later Vedic literature. It is written in the Sūtra style, but it is partly post-Vedic in date, like its R̥gvedic counterpart, the R̥gvidhāna (Gonda 1951; 1975: 320). This text will be discussed at the end of the Sūtra section (1.2.8).

At this point it can be concluded that there is no reference to the mirror in the Saṃhitā and Brāhmaṇa texts, which form the earliest part of Vedic literature, while copious references to the object appear in the earliest texts of later Vedic literature.

1.1 The early Upaniṣads

The word *ākāśa-* in the sense of ‘mirror’ occurs a number of times in four early Upaniṣads. One of these is the lesser known Saṃhitāyā Upaniṣad, which is included in two versions in the two Āraṇyakas of the R̥gveda (see below 1.1.2).

1.1.1 The ‘man’ (*puruṣa*) in the mirror as a manifestation of the universal ‘soul’ (*brahma*, *ātman*)

The **Kauṣītaki-Upaniṣad (= Kauṣītaki-Brāhmaṇa-Upaniṣad)** has been included as chapters 3–6 in the Śāṅkhāyana-Āraṇyaka, which in most parts is an older text.⁴ One passage records the views of the learned Brahmin Gārgya Bālāki concerning the ‘universal soul’ or ‘mystic power (behind everything)’ (*brahma*) and how these views are confuted by King Ajātaśatru of Kāśī. After the introduction on the context of their discussion, the KBU gives an (afterwards added) abbreviated summary of the beliefs of these two persons, divided into two parts, the

4 The teachers Śāṅkhāyana and Kauṣītaki belong to the same R̥gvedic school; there are texts ascribed separately to these two teachers that are often almost identical. Such is largely the relation between the Gr̥hyasūtras of Śāṅkhāyana and Kauṣītaki (Gonda 1977: 606–607), as will be noted below in connection with the ŚGS.

first dealing with the macrocosmos (namely, divinities), the second with the microcosmos (the body). Then follows the actual discussion, where Bālāki finds *brahma* in the ‘person’ (*puruṣa*, literally ‘man’) in the sun, in the moon, and so forth, but time and again the king gives a more rational explanation. In each case the same set phrases are used, so that it is sufficient to record here only the passage relating to the mirror.

KBU 4,2,1 (= ŚĀ 6,1,1) atha ha vai gārgyo bālākir anūcānaḥ saṁspr̥ṣṭa āsa / so ‘vasad uśīnareṣu savaśamatsyeṣu⁵ kurupañcāleṣu kāsivideheṣv iti / sa hājātaśatruṁ kāśyam āvrajyovāca *brahma te bravāṇīti* / taṁ hovācājātaśatruḥ *sahasraṁ dadmas ta ity etasyām vāci janako janaka iti vā u janā dhāvanti* / **2** āditye br̥hañ candramasy annaṁ vidyuti tejaḥ stanayitnau śabdo vāyāv indro vaikuṇṭha ākāśe pūrṇam agnau viśāsahir ity apsu satyam ity adhidaivatam / athādhyātman / **ādarśe** pratirūpaś chāyāyām dvitīyaḥ pratiśrutkāyām asur iti śabde mṛtyuḥ svapne yamaḥ śarīre prajāpatir dakṣiṇe ‘kṣiṇi vācaḥ savye ‘kṣiṇi satyasya / ... **11** sa hovāca bālākir ya evaiṣa ādarśe *puruṣas tam evāham upāsa* iti / taṁ hovācājātaśatruḥ *mā maitasmin saṁvādiṣṭhāḥ / pratirūpa iti vā aham etam upāsa* iti / sa yo haitam evam upāste pratirūpo haivāsy prajāyām ājāyate nāpratirūpaḥ /

IV,1 Now Gārgya Bālāki was a learned man who had many contacts. He had lived among the Uśīnaras, the Matsyas and the associated Vaśas, the Kurus and Pañcālas, the Kāśis and Videhas. He went to Ajātaśatru, the (king of the) Kāśi(s), and said to him: “Let me teach Brahman to you.” To him said Ajātaśatru: “We give you a thousand (cows). (I say this because, or in order that) to a statement like this people come flocking in, thinking ‘A Janaka, a Janaka.’” [IV,2 In the sun the lofty one, in the moon food, in lightning splendour, in thunder noise, in wind Indra Vaikuṇṭha, in space the full[ness], in fire the conquering one, in the water truth. So far concerning the cosmic entities. And now the microcosmic aspect. **In the mirror** the image (soul), in the shadow the double (‘Doppelgänger’), in the echo the external soul, in the sound (following a walking man) death, in a dream Yama (the god of death), in the body Prajāpati, in the right eye the (*puruṣa*) of speech, in the left eye the (*puruṣa*) of truth.] ... IV,11 Bālāki said: “The person **in the mirror** I regard (as Brahman or Ātman).” To him Ajātaśatru said: “Don’t make me discuss him. I only regard him as the reflection (*pratirūpa*).” He who regards him as such, in his offspring will be born someone who is his reflection and not someone who is not. (Transl. Bodewitz 2002: 59–64; see Keith 1908: 36, 38; Olivelle 1998: 355, 357)

Bodewitz (2002: 64 n. 220) aptly observes that here “primitive” conceptions of the soul are rejected as equivalents of [Brahma or] Ātman. He points out that in the Jaiminīya-Upaniṣad-Brāhmaṇa (1,27,5), the person in the sun is taken as the *pratirūpa*, referring apparently to the person in the eye. One can indeed see in JUB 1,25–27 an older discussion of the topic dealt with in the above texts. This could be expected from the conclusion of Masato Fujii (2004) that the JUB, belonging to the Jaiminīya school of Sāmaveda, is the very earliest Upaniṣad – and a text where the word *ākāśa*- ‘mirror’ does not yet occur. Along with the Āraṇyakas, the JUB represents the transition from the Brāhmaṇas to the Upaniṣads.

The **Br̥had-Āraṇyaka-Upaniṣad** has been included (as a later addition) in the older Śatapatha-Brāhmaṇa as its final sections. Both the BĀU and the ŚB have been handed down in slightly different versions belonging to the Kāṇva (K) and Mādhyandina (M) schools of the White Yajurveda (see Olivelle 1998: 29–35, including a concordance). BĀU 2,1 (= ŚBM 14,5,1) deals with the same topic as KBU 4,2. Here, however, there is no summary after the introduction. Also, Ajātaśatru explains the ‘man’ in the waters as *pratirūpa* (translated as ‘resemblance’ by Olivelle), calling the ‘man’ in the mirror *rociṣṇu* ‘the shining one’. The Pāraskara-Gr̥hyasūtra, which like the BĀU belongs to the White Yajurveda, in 2,6,28 has *rociṣṇur asi* ‘you are shining’ as its peculiar mantra addressed to the mirror in the *saṁāvartana* rite (see below 1.2.1).

⁵ *savaśa*- is an emendation for *savasa(n)*- in the manuscripts.

BĀU 2,1,1 dr̥ptabālākīr hānūcāno gārgya āsa / sa hovācājātaśatruṃ kāśyaṃ *brahma te bravāṇīti* / sa hovācājātaśatruḥ *sahasram etasyāṃ vāci dadmo janako janaka iti vai janā dhāvanīti* / ... **9** sa hovāca gārgyaḥ / ya evāyam **ādarśe** puruṣa etam evāham brahma upāsa iti / sa hovācājātaśatruḥ / mā maitasmin samvadiṣṭhāḥ / rociṣṇur iti vā aham etam upāsa iti / sa ya etam evam upāste rociṣṇur ha bhavati / rociṣṇur hāsya prajā bhavati / atho yaiḥ samnigacchati sarvāṃs tān atirocate / ...

1. There was once a learned Gārgya named Dr̥pta-Bālāki. He said to Ajātaśatru, the king of Kāśi: “Let me tell you the formulation of truth (brahman).” Ajātaśatru replied: “We’ll give you a thousand cows for such a speech! People are sure to rush here, crying, ‘Here’s a Janaka! Here’s a Janaka!’” ... **9**. Gārgya then said: “It is the person here **in a mirror** that I venerate as brahman.” Ajātaśatru replied: “Don’t start a discussion with me about him! I venerate him only as the shining one. Anyone who venerates him in this way will shine, his children will shine, and he will outshine everyone he meets.” (Transl. Olivelle 1998: 59, 61)

In **Bṛhad-Āraṇyaka-Upaniṣad 3,9**, the famous authorities Yājñavalkya and Vidagdha Śākalya (see also below 1.1.2) debate on the identities of the deities connected with the various manifestations of self (*ātman*). The following list mentions first the manifestations named by Yājñavalkya, then in parentheses the corresponding deity named by Śākalya; the translations are Olivelle’s (1998: 95, 97). After the list follows the passage with ‘mirror’ in full.

- 10 śarīraḥ puruṣaḥ, ‘bodily person’ (amṛtam, ‘the immortal’)
- 11 kāmamayaḥ puruṣaḥ, ‘person immersed in passion’ (striyaḥ, ‘women’)
- 12 āditye puruṣaḥ, ‘that person up there in the sun’ (satyam, ‘truth’)
- 13 śrautrah puruṣaḥ, ‘this person connected with hearing and echo’ (diśaḥ, ‘the quarters’)
- 14 chāyamayaḥ puruṣaḥ, ‘this person consisting of shadow’ (mr̥tyuḥ, ‘death’)
- 15 ādarśe puruṣaḥ, ‘this person here in a mirror’ (asuḥ, ‘life’)
- 16 apsu puruṣaḥ, ‘this person here in the waters’ (varuṇaḥ, ‘Varuṇa’)
- 17 putramayaḥ puruṣaḥ, ‘this person associated with the son’ (prajāpatiḥ, ‘Prajāpati’)

BĀU 3,9,15 rūpāny eva yasyāyatanam cakṣur loko mano jyotir yo vai tam puruṣam vidyāt sarvasyātmanah parāyanam sa vai veditā syād yājñavalkya / veda vā aham tam puruṣam sarvasyātmanah parāyanam yam āttha / ya evāyam **ādarśe** puruṣaḥ sa eṣaḥ / vadaiva śākalya tasya kā devateti / asur iti hovāca /

“The person whose abode is visible appearances, whose world is sight, and whose light is the mind—should someone know that person, the final goal of every self, he would be a man who truly knows, Yājñavalkya.” “I know that person, the final goal of every self, of whom you speak. He is none other than this person here **in a mirror**. But tell me, Śākalya—who is his god?” “Life,” Śākalya replied. (Transl. Olivelle 1998: 97)

The **Chāndogya-Upaniṣad**, belonging to the Kauthuma school of Sāmaveda, tells in its chapter 8,7 of the creator-god Prajāpati’s teaching concerning the self (*ātman*):

ChU 8,7,1 ya ātmāpāhatapāpmā virajo vimṛtyur viśoko vijighatso ‘pipāsaḥ satyakāmaḥ satyasaṅkalpaḥ so ‘nveṣṭavyaḥ sa vijijñāsitavyaḥ / sa sarvāṃś ca lokān āpnoti sarvāṃś ca kāmān yas tam ātmānam anuvidya vijānātīti ha prajāpatir uvāca /

“The self (*ātman*) that is free from evils, free from old age and death, free from sorrow, free from hunger and thirst; the self whose desires and intentions are real—that is the self that you should try to discover, that is the self that you should seek to perceive. When someone discovers that self and perceives it, he obtains all the worlds, and all his desires are fulfilled.” So said Prajāpati. (transl. Olivelle 1998: 279, 281)

The god Indra and the demon Vairocana, having become aware of Prajāpati’s words, came to Prajāpati with firewood in their hands and lived as celibate students in Prajāpati’s abode for

thirty-two years in order to learn that self from him. Then Prajāpati asked what they wanted, and they told him.

ChU 8,7,4 tau ha prajāpatir uvāca ya eṣo ‘kṣiṇi puruṣo dṛśyata eṣa ātmeti hovāca / etad amṛtam abhayam etad brahmeti / atha yo ‘yaṁ bhagavo ‘psu parikhyāyate yaś cāyam **ādarśe** katama eṣa iti / eṣa u evaiṣu sarveṣv anteṣu parikhyāyata iti hovāca /

Prajāpati then told them: “This person that one sees here in the eye—that is the self (*ātman*); that is the immortal; that is the one free from fear; that is *brahman*.” “But then, sir, who is the one that’s seen here in the water and here **in the mirror**?” “It is the same one who is seen in all these surfaces,” replied Prajāpati. (Transl. Olivelle 1998: 281)

The **Kaṭha-Upaniṣad** already belongs to the younger layer of verse Upaniṣads.

KU 6,5 yathā**ādarśe** tathātmāni yathā svapne tathā piṭṛloke /
yathāpsu parīva dadṛśe tathā gandharvaloke chāyātapayor iva brahmaloke /

As **in a mirror**, so (Brahman may be seen clearly) here in this body;
as in a dream, in the world of the Fathers; as in the water, he is seen about in the world of the Gandharvas; as in light and shade, in the world of Brahmā. (Transl. Müller 1884: II, 22)

As **in a mirror**, so in the body (*ātman*);
As in a dream, so in the fathers’ world;
As in water a thing becomes somewhat visible, so in the Gandharva world;
Somewhat as in shadows and light, so in brahman’s world.” (Transl. Olivelle 1998: 400–401)

1.1.2 Incomplete mirror-image of one’s self as a sign of death

Chapters 7 and 8 of the **Śāṅkhāyana-Āraṇyaka** and chapter 3 of the **Aitareya-Āraṇyaka** contain two versions of the **Samhitāyā Upaniṣad** (AiĀ 3,1,1 = ŚĀ 7,2,1 athātaḥ samhitāyā upaniṣat). The two Āraṇyakas represent the two main śākhās of the Ṛgveda, and the Samhitāyā Upaniṣad deals with the esoteric meaning of the various recitational forms of the Ṛgveda-Samhitā existing at the time of its composition, namely, the samhitā-pāṭha, the pada-pāṭha and the krama-pāṭha (Gonda 1975: 16–17, 426; Keith 1909: 39–45). As it contains little of philosophical interest, it is not widely known and studied (therefore, for example, it is not included in Olivelle’s *The Early Upaniṣads*, 1998). Among the many teachers quoted in it are Jāratkāraḥ Ārtabhāga, who in BĀU 3,2 questions Yājñavalkya, and Śākalya, apparently the same Vidagdha Śākalya connected with Yājñavalkya and King Janaka of Videha in ŚB 11,6,3 and BĀU 3,9 and 4,1 (see above 1.1.1). Śākalya is supposed to be the author of the Ṛgveda-Padapāṭha (Macdonell & Keith 1912: II, 368–369). According to Keith (1909: 44–45), the Samhitāyā Upaniṣad is posterior to the Brāhmaṇa texts, but possibly earlier than the BĀU. The reference to the mirror figures in a passage of this Samhitāyā Upaniṣad, which deals with omen signs foretelling an imminent death.

ŚĀ 8,6–7 sa yaś cāyam aśarīraḥ prajñātmā yaś cāsāv āditya ekam etad ity avocāma tau yatra vipradṛśyete // 6 // candramā ivādityo dṛśyate na raśmayāḥ prādūr bhavanti / lohinī dyaur bhavati yathā mañjiṣṭhāḥ / vyastaḥ pāyur bhavati / sampareto ‘syātmā na ciram iva jīviṣyātīti vidyāt / sa yat karaṇīyaṁ manyeta tat kuryāt / athāpy **ādarśe** vodake vā jihmaśirasam vāśirasam vātmānaṁ paśyen na vā paśyet / tad apy evam eva vidyāt / athāpi cchidrā chāyā bhavati na vā bhavati tad apy evam eva vidyāt / athāpi cchidra ivādityo rathanābhir ivākhyāyet tad apy evam eva vidyāt / ...

“This incorporeal self here and yonder sun are one,” we have said. When these two are seen apart, (6.) the sun appears like the moon, its rays do not shine forth, the sky is leaden like madder, the anus is gaping, “the self is on the point of death, it will not live long,” so one should know. Again, if he sees himself **in a mirror** or water with a crooked head or without a head, or cannot see himself, he should know that it is so. Again, if his shadow is pierced, or he throws no shadow,

he should know that it is so. Again, if the sun appears pierced like the nave of a chariot wheel, he should know that it is so. ... (Transl. Keith 1908: 53–54)

AiĀ 3,2,4 sa yaś cāyam aśarīraḥ prajñātmā yaś cāsāv āditya ekam etad ity avocāma / tau yatra vihiyete candramā ivādityo dṛśyate na raśmayah prādur bhavanti lohinī dyaur bhavati yathā mañjiṣṭhā vyastah pāyuh kākakulāyagandhikam asya śiro vāyati sampareto ‘syātmā na cīram iva jīviṣyati vidyāt / sa yat karaṇīyaṁ manyeta tat kurvīta yad anti yac ca dūraka iti sapta japed ādityapratnasya retasa ity ekā yatra brahmā pavamāneti ṣaḥ ud vyaṁ tamasaḥ parīty ekā / athāpi yatra chidra ivādityo dṛśyate rathanābhir ivābhikhyāyeta chidrām vā chāyāṁ paśyet tad apy evam eva vidyāt / athāpy **ādarśe** vodake vā jihmaśirasam vātmānaṁ paśyed viparyaste vā kanyāke jihmena vā dṛśyeyātām tad apy evam eva vidyāt / ...

We have said that this incorporeal conscious self and that sun are one and the same. Where these two are separated, the sun is seen like the moon, its rays do not manifest themselves, the sky is red like madder, the wind is not retained, his head smells like a raven’s nest, and a man should know that his self is gone and that he will not have long to live. Let him do then whatever he considers must be done, and recite seven verses beginning, “What is near, what is far” (RV., IX, 67, 21–27), the single verse, “Of the ancient seed” (RV., VIII, 6, 30), six verses beginning, ‘Where purifying Brahman’ (RV., IX, 113, 6–11), and the single verse, “We from the darkness” (RV., I, 50, 10). Next when the sun is seen pierced, and looks like the nave of a cart-wheel, or he sees his shadow pierced, let him know that this is so. Next when he sees himself **in a mirror** or in the water with a crooked head or without a head, or when his pupils are seen inverted or crooked, let him know that this is so. ... (Transl. Keith 1909: 251–252)

1.2 The Sūtras

1.2.1 Kātyāyana-Śrautasūtra

The Brāhmaṇa texts were followed by a new category of prose texts called Sūtra, which endeavoured to codify the Vedic ritual systematically and compactly by using increasingly short rules, also called *sūtra* (Gonda 1977: 465–466). The Śrautasūtras constitute the oldest class of Sūtra texts, prescribing how the *śrauta* sacrifices should be performed (Gonda 1977: 489–545). The complex *śrauta* rites, the main topic of the older Brāhmaṇa texts, require three sacrificial fires and often more than one priest. They contrast with the simpler *grhya* (or “domestic” or life-cycle) rites, which are usually performed by the householder himself or by his family priest; they require just one sacrificial fire or no fire at all, and are described in the younger class of Sūtras, the *Grhyasūtras* (Gonda 1977: 546–615).

The word *ādarśa*- ‘mirror’ is attested just once in the Śrautasūtras. This single occurrence is in the **Kātyāyana-Śrautasūtra**, which is known to be a very late text, probably younger than most of the *Grhyasūtras*: it can be dated to about 300–250 BCE (Gonda 1977: 528–529; Parpola 1994). In a passage describing the sacrificial utensils used in *śrauta* rites, the KŚS tells us about the shape of the Vedic mirror:

KŚS 1,3,40 ādarśākṛti prāśitraharaṇam / **41** camasākṛti vā /

The vessel for the *prāśitra* (i.e. the portion of the sacrificial food to be eaten by the Brahman priest) has the shape of **a mirror**, or it has the shape of a (wooden) goblet (for drinking Soma).

Thite (2006: I, 13) incorrectly translates *ākṛti* as ‘size’ instead of ‘shape’. The medieval commentator Yājñikadeva glosses *ādarśākṛti* with *ādarśasadrśam vartulam* ‘similar to mirror, i.e. circular’. The goblets for drinking Soma are square or rectangular and have handles with different shapes for different priests (see Ranade 2006: 178, 233, 241). The *prāśitraharaṇa* also has a handle, but the illustrated examples (Ranade 2006: 246; Caland & Henry 1906: I, pl. III no. 15) are oval at the base but ending in a sharp top. They thus agree with the description of

Sāyaṇa's commentary on ŚB 1,3,1,6: *prāśitraharaṇam gokarṇākṛti pātram*, “*prāśitraharaṇa* is a vessel that has the shape of a cow's ear”. In the funeral of an *āhitāgni* (one who has established the three sacred fires for *śrauta* rites), a *prāśitraharaṇa* is placed near both ears of the deceased before he is cremated (ŚB 12,5,2,7 and JB 1,48).

1.2.2 The bath (*snāna*) and return (*samāvartana*) from Veda study

Technically there is another Śrautasūtra besides the KŚS with mirror references, namely the **Baudhāyana-Śrautasūtra** (Gonda 1977: 514–518). For some unexplained reason, when the corpus of ritual Sūtras ascribed to Baudhāyana was compiled, the chapter dealing with the domestic rite of *samāvartana* (referred to in BGS 2,6,1 as: *vedam adhītya snāsyann ity uktam samāvartanam*) was moved from the **Baudhāyana-Gṛhyasūtra** to BŚS 17,39–42. These chapters form part of the supplement called *uttarā tatiḥ* (BŚS 17–18), which otherwise deals with *śrauta* topics (Caland 1907: II, ii–iv, vii–viii). “How it occurred to the diasceusts of the śrautasūtra to insert the *samāvartana* among the subjects treated in the śrautasūtra, I am, however, at a loss to explain” (Caland 1907: II, iv). That the *samāvartana* chapters of the BŚS originally belonged to the BGS is clear from their similarity to the corresponding passages of the other Gṛhyasūtras, and also from their mention of the mirror (*ādarśa*), which is otherwise lacking in the Śrautasūtras.

The life-cycle rite called *snānam* ‘bath’ or *samāvartanam* ‘return’ deals with ceremonies marking the end of many years of learning the Veda as a celibate student living an ascetic life under an authoritative teacher. The youth has his hair and beard shaven, donates a cow to his teacher, takes a bath, dons new clothing and adorns himself with decorations like earrings, a garland and facial make-up. As a *snātaka*, or ‘one who has taken the bath (that ends life as a student)’, he is now entitled to the privileges of adult life. He is no longer obliged to walk barefooted or sleep on the ground; he can use a parasol to protect himself from sunshine and rain. When he has returned home, he may marry and become a householder. The Gṛhyasūtras usually start the description of the *samāvartana* with an extensive list of the requisites to be procured for the ceremony (cited below *in extenso* from the BŚS); then they discuss the choice of the calendrical star under which the bath may taken in order to achieve the specific wishes of the graduate with regard to his future life. The BŚS passage on the use of the mirror is also cited below more extensively, while parallel other Sūtra texts are quoted more selectively.

BŚS 17,39 vedam adhītya snāsyann upakalpayata erakāṃ copabarhaṇam ca nāpitaṃ ca kṣuram ca dārūṇi copastaraṇam ca vṛkalāṃś ca dantadhāvanam uṣṇāś cāpaḥ śītāś ca sarvasurabhipiṣṭam cāñjanaṃ ca srajaṃ **cādarśam** cāhataṃ ca vāsaḥ prāvaraṇam ca vasanāntaraṃ bādaraṃ maṇirṇ suvarṇopadhānaṃ sūtraṃ ca pravartau ca daṇḍam copānahau ca chattraṃ ānaḍuham carma sarvarohitaṃ iti / ete ‘sya saṃbhārā upakṛtā bhavanti / snānasya mīmāṃsā / rohiṇyāṃ snāyād ity ekaṃ ...

One who is going to take a bath after having completed the study of the Veda procures a bed of grass and a pillow, a barber, a razor, pieces of wood, a carpet, splinters, teeth-cleanser, hot and cold water, powder of fragrant substances, collyrium, garland, **a mirror**, a new piece of cloth, a bead of jujube set in gold, thread, two earrings, a staff, foot-wear, an umbrella, and the skin of fully red ox. These substances are procured for him. The discussion about the bath: There is a view that one should take bath under the Rohiṇī constellation ... (Transl. Kashikar 2003: III, 1125)

BŚS 17,41–42 atha srajaṃ pratimuñcate // 41 // śubhike śira āroha śobhayantī mukhaṃ mama / mukhaṃ hi mama śobhaya bhūyāṃsaṃ ca bhagaṃ kuru // yāṃ tvā jahāra jamadagniḥ śraddhāyai kāmāyānyai / tām tvemām pratimuñce ‘haṃ varcase ca bhagāya ceti / traikakudenāñjanenāṅkte yad āñjanaṃ traikakudaṃ jātaṃ himavata upari / tena vām āñje mayi parvatavarcasam astv iti / **ādarśe** paripaśyate yan me manaḥ parāgatam ādarśe paripaśyataḥ / idaṃ tan mayi paśyāmy

*āyusyaṃ varcasyaṃ me astv iti / athopānahāv upamuñcate dyaaur asīti dakṣiṇe pāde pṛthivy asīty
uttare / atha daṇḍam ādatte sakhā mā gopāyeti / chatram ādatte divyo 'si suparṇo antarikṣān
mā pāhīti / athoditeṣu nakṣatreṣūpaniṣkramya diśa upatiṣṭhate ... nakṣatrāṇi ... candramasam /
samupasthāya yatra yatra kāmāyate tad etīty etat samāvartanam //* 42 //

Then he suspends the garland with the two verses: “O garland, do thou ascend my head adorning my face. Do thou decorate my face; promote my fortune. ... I suspend for splendour and fortune thee whom Jamadagni carried for faith and desire.” He puts into his eyes the collyrium from Trikakud with the verse, “The collyrium from Trikakud which is born of the Himalayas, with that I anoint (my eyes); may it grant me the splendour of the mountain.” He looks **into the mirror** with the verse, “My mind which has gone astray while I am looking **into the mirror**, I recall within me; may it grant me long life and splendour.” He then wears the footwear with the formula, “Thou art heaven” on the right foot, “Thou art earth” on the left one. He takes up the staff with the formula, “Do thou, my companion, guard me.” He takes up the umbrella with the formula, “Thou art the divine eagle; do thou guard me in the midregion.” He stays there until the stars rise. As soon as the stars rise, he goes out and prays to the quarters ... to the stars ... to the moon ... After having prayed together, he may move according to will. This is the Samāvartana rite. (Transl. Kashikar 2003: III, 1131; 1133)

Interestingly, the mirror mantra follows its source TS 6,6,7,2 in the beginning, but in the latter part adjusts it, adding the word for ‘mirror’. On this and parallel mantras, see 1.3 further below.

In the **Bhāradvāja-Gr̥hyasūtra**, the list of requisites is somewhat different, but those mentioned in close association with the mirror are the same. The mantra with which the mirror is looked into is slightly different and lacks the word for ‘mirror’:

BhGS 2,18 vedam adhītya snāsyann upakalpayate pālāśīm samidham udapātraṃ cairakām copabarhaṇam ca snānīyapiṇḍam ca sārvasurabhipiṣṭam candanam ca sūtram sopadhānam maṇim sapāśam bādaram maṇim uttarāsaṅgam ca sātaram ahate ca pravartau ca srajam cāñjanam cādarśopānahau daṇḍam ca chatram ca / atha nakṣatrāṇi ...

BhGS 2,22 ... atha srajam pratimuñcate ... athānkte yad āñjanam traikakudam ... **ādarśam** avekṣate yan me varcaḥ parāpatitam ātmānam paripaśyataḥ / idam tat punar ādade bhagena saha varcaseti / vāgyata āsta ā nakṣatrāṇām udayat / uditeṣu nakṣatreṣūpānahāv upamuñcate ... daṇḍam ādatte ... chatram ādatte ...

... He looks at **the mirror** (saying,) “My splendour which has flown away while I am looking at myself, this I take back with good fortune and splendour.” ...

In the **Hiraṇyakeśi-Gr̥hyasūtra**, there is no list of the requisites in the beginning; the mirror mantra is cited by its initial words, implying that it follows TS 6,6,7,2.

HGS 1,9,1 adhītya vedam snānam 2 tad vyākhyāsyāmaḥ 3 udagayana ...

1. After he has studied the Veda, the bath (which signifies the end of his studentship is taken by him). 2. We shall explain that (bath). 3. During the northern course of the sun ... (Transl. Oldenberg 1892: II, 161)

HGS 1,11,1 ... kuṇḍale pratiharate dakṣiṇe karṇe dakṣiṇām savye savyam / 2 ... kuṇḍale saṃgrhṇīte / 3 ... grīvāyām maṇim pratimuñcate / 4 ... srajam pratimuñcate / 5 yad āñjanam traikakudam ... iti traikakudenāñjanenānkte tasminn avidyamāne yenaiva kena cit / 6 yan me manah parāgatam ity **ādarśe** ‘vekṣate / 7 ... vainavam daṇḍam pratigrhya ... trir ūrdhvam unmārṣti / 8 ... triḥ pradakṣiṇam upary upari śiraḥ pratiharate / 9 ... upānahāv adhyavarohati / 10 ... cchatram pratigrhṇāti / 11 ... daṇḍam punar ādatte yady asya hastāt patati /

1. He puts on the two earrings, the right one to his right ear, the left one to his left ear ... 2. ... he clasps the two earrings. 3. ... he ties the pellet (of wood, mentioned [in HGS 3,10,6]) to his neck. 4. He puts on a wreath ... 5. “The salve coming from the Trikakud (mountain) ... “ ... with (this verse) he anoints himself with Traikakuda salve, (or) if he cannot get that, with some other (salve). 6. With (the verse) “My mind that has fled away” (Taitt[irīya-]Saṃhitā VI,6,7,2), he looks **into a mirror**. 7. ... he takes a staff or reed ... and he thrice wipes it off, upwards from below. 8. ... he swings (the staff) three times from left to right over his head. 9. ... he steps into the shoes. 10. ...

he takes the parasol. 11. ... he takes up his staff, if it has fallen from his hand. (Transl. Oldenberg 1892: II, 167–169)

In the **Āgniveśya-Gṛhyasūtra**, the mantra is closer to that of Baudhāyana (containing the word for ‘mirror’), but still differs from it slightly. In this text, applying the collyrium comes after looking at the mirror.

ĀgnivGS 1,3 (p. 18) vedam adhītya snāsyann upakalpayate ... mālām **cādarśam** cāñjanam ca daṇḍam ca chatram copānahau cāṇḍuham carma sarvalohitam ity ete ‘sya sambhārā upaklptā bhavanti ... (p. 22) **ādarśe** samavekṣate *yan me manaḥ parāgatam ātmānam ādarśe paripaśyati / idam tat punar ādade ‘ham āyuṣe ca bhagāya ceti / athāñjanenāñkte yad āñjanam traikakudam ...* (p. 23) ... daṇḍam ādatte ... chatram ādatte ... athopānahāv upamuñcate ...

The available manuscripts of the **Vādhūla-Gṛhyasūtra** have not preserved the passages where the word *ādarśa* is expected to occur, but the lost parts are likely to be similar to the closely related **Āgniveśya-Gṛhyasūtra** (see Ravi Varma 1940: iii; Gonda 1977: 592–593). Already the list of the requisites is missing after the beginning, which runs as follows:

VādhGS 2,10,1 vedam anūcya snāsyann upakalpayate /

In the modern ritual manual of the Bādhūlakas in Kerala, written in the Malayalam language (Nampūtiri 1978), the mirror figures in the list of the requisites for the *samāvartana* (274,10–13): ... uttarīyam, candanam, añjanam, cāntu, mālā, vennīruṁ paccanīruṁ, katti, **vālkkaṇṇāṭi**, muttu kōrtta caratu, kuṇḍalañṇaḥ it’ ellām orumiccuṁ tōṭṭu. This can be translated as: “after having collected together an upper garment, sandalwood paste, collyrium, ointment, a wreath, hot water, cold water, a knife, **a mirror provided with a tail (i.e. handle)**, a cord strung with pearls, and earrings, all this”. The mirror is also mentioned in the description of the rite (281,10): pinne **kaṇṇāṭi** eṭuttu mukham tūṣṇīm nōkki **kaṇṇāṭi** veccu, in translation “then taking **the mirror**, looking silently at the face, putting down **the mirror**”.

The **Āpastamba-Gṛhyasūtra** skips the mantras because these have been given in the separate mantra collection called *Āpastamba-Mantra-Pāṭha*, stating that they are to be used ‘according to the keywords’ (*yathāliṅgam*). Here the mantra does not mention the mirror; it is parallel to the mantra of the BhGS in having the word *varcas* ‘splendour’ in the initial part.

ĀpGS 5,12,1 vedam adhītya snāsyann ... 11 evam uttarair yathāliṅgam srajaḥ śirasya āñjanam **ādarśāvekṣaṇam** upānahau chatram daṇḍam iti ...

1. Having studied the Veda, when going to take the bath (which signifies the end of his student-ship), ... 11. In the same way he should with the following (formulas, M. II,8,9–9,5), according to the characteristics (contained in them), (put) a wreath on his head, anoint (his eyes), look into **a mirror**, (put on) shoes, (and should take) a parasol and a staff. ... (Transl. Oldenberg 1892: II, 277)

See Section 1.3 below on the mantra for looking at the mirror (*ādarśāvekṣaṇam*), which is:

ĀpMP 2,9,2 yān me vārcaḥ parāgatam ātmānam upatiṣṭhati /
idam tat pūnar ā dade dīrghāyutvāya vārcaḥ //

The **Vaikhānasa-Gṛhyasūtra** is perhaps the youngest of the Gṛhyasūtras. Here the original mantra of looking into the mirror accompanies the salving of the left eye with collyrium, while the mirror is looked at with the mantra generally used for many different actions.

VaikhGS 2,13 atha samāvartanam vyākhyāsyāmaḥ ... **15** ... *yad āñjanam* iti dakṣiṇam cakṣur *yan me mana* iti vāmaṁ cāñjanenāñjayitvemāḥ *sumanasa* iti srajam ādāya *devasya tvety* **ādarśam**

avekṣate / tenaiva vaiṇavaṃ daṇḍam iḥuṃ gr̥hṇīyāt / *indrasya vajo* 'sīti vegavejam iti trir unmārṣti / *upānahāv* ity upānahāv āruhya *prajāpateḥ śaraṇaṃ bhuvah punātv* iti dvābhyāṃ chattraṃ gr̥hṇīyāt / *yo me daṇḍa* iti punar daṇḍam pramāde saty āharet ...

Now, we shall explain the returning home. ... With the mantra: "The salve from Trikakud", he anoints with salve his right eye, and with the mantra: "My mind that has fled away", his left eye. Having taken, with the mantra: "These delightful flowers, ..." a wreath (and having put it on his head or around his neck), he looks, with the formula: "On the impulse of the god Savitṛ I take thee ...", **into a mirror**. With the same formula he takes a straight staff of bamboo and wipes along it thrice (from the bottom to the point), repeating the mantras ... Having, with the mantra: "I step into the sandals", stepped into the sandals, he takes the parasol, with the two mantras ... With the mantra: "may staff, which has fallen down," etc., he takes the staff again, in case any mishap to it should occur (e.g. if it falls from his hand). ... (Transl. Caland 1929: 58; 61–62)

All of the texts cited so far that deal with the *samāvartana* belong to the Taittirīya school of the Black Yajurveda. The Gr̥hyasūtras of the other schools of the Black Yajurveda (MGS, VārGS, KGS) do not mention the mirror.

The **Pāraskara-Gr̥hyasūtra** belongs to the White Yajurveda; among other things it differs in terms of the mantras. The mantra addressed to one's self seen in the mirror (*rociṣṇur asi*, 'you are shining') is based on BĀU 2,1,9, a text also belonging to the White Yajurveda, where the "man" seen in the mirror is said to be *rociṣṇu*, see above, 1.1.1). Jayarāma in his commentary on the PGS glosses *rociṣṇuḥ* with *prakāśakaḥ*, 'shining'.

PGS 2,6,1 vedaṃ samāpya snāyāt ... **25** uṣṇīṣeṇa śiro veṣṭayate yuvā *suvāsā* iti **26** *alaṃkaraṇam asi bhūyo* 'alaṃkaraṇam bhūyād' iti karnaveṣṭakau **27** *vṛtrasyetye* añkte 'kṣiṇī **28** *rociṣṇur asīty* ātmānam **ādarśe** prekṣate **29** chattraṃ pratigr̥hṇāti ... **30** ... upānahau pratimuñcate **31** ... vaiṇavaṃ daṇḍam ādatte ...

1. When he has finished the Veda, he should take the bath (by which he becomes a Snātaka). ... 25. He binds a turban to his head with (the verse [RV 3,8,4; PGS 2,2,9]), "A youth, well attired." 26. (He puts on) the two earrings with (the words), "An ornament art thou; may more ornaments be mine." 27. He salves his two eyes with (the formula), "Vṛtra's" (Vāj[asaneyi-]Saṃh[itā] IV,3b). 28. With (the words, "Brilliant art thou," he looks at his image **in a mirror**. 29. He takes a parasol ... 30. ... he puts on the two shoes. 31 ... he takes a bamboo staff. ... (Transl. Oldenberg 1886: II, 312; 316)

No reference to a mirror is found in the *samāvartana* descriptions of the R̥gvedic Gr̥hyasūtras and the Sāmavedic Gr̥hyasūtras of the Kauthuma and Rāṇāyanīya schools, while the other paraphernalia of the rite are more or less the same as in the Yajurvedic Gr̥hyasūtras.

Thus, Śāṅkhāyana-Gr̥hyasūtra 3,1 prescribes among other things two (new) garments, a golden ornament, a turban, a parasol, shoes and a bamboo staff.

Āśvalāyana-Gr̥hyasūtra 3,8,1 enumerates "a jewel (to be tied round the neck), two earrings, a pair of garments, a parasol, a pair of shoes, a staff, a wreath, (pounded seed of the Karañja fruit) for rubbing with, ointment, eye salve, a turban; (all that) for himself and for the teacher" (transl. Oldenberg 1886: I, 226).

In Gobhila-Gr̥hyasūtra 3,4–5, the things put on after the bath include just two garments (an undergarment and an upper garment) which have not yet been washed, a garland, two shoes and a bamboo staff (GGS 3,4,25–27, Oldenberg 1892: II, 84). The same applies to the Khādīra-Gr̥hyasūtra (KhGS 3,1,24–26; Oldenberg 1886: I, 408–409).

In its *samāvartana* chapter, the **Jaimini-Gr̥hyasūtra** of the Jaiminīya school of Sāmaveda includes the mirror in its enumeration of requisites, but not in the description (given below in translation only) of how the garments and decorations are put on and the staff taken up. The explanation for this seeming discrepancy is that the use of the "paste for the bath, ointment,

flowers, collyrium and mirror” and their mantras has already been explained in the preceding chapter on the *godāna* or *keśāntakaraṇa* rite (JGS 1,18; see 1.2.3 below), the proceedings of which are included in the *samāvartana*. Thus, the mirror appears to be used in the *samāvartana* of the Jaiminīyas, but not in the same way as in the *samāvartana* of the Yajurvedins.

JGS 1,19 (Caland 1922: 17,3–5) vedam adhītya vratāni caritvā brāhmaṇaḥ snāsyān saṃbhārān upakalpayate ‘hataṃ vāsa erakāṃ snānam anulepanaṃ sumanasa āñjanam **ādarśam** ahate vāsasī trivṛtaṃ maṇiṃ vaiṇavaṃ daṇḍaṃ śukle upānahau ... keśāntakaraṇena mantrā vyākhyātāḥ parivāpanaṃ ca

After he has studied the Veda and observed the observances, a brāhmin, being about to take the (absolving) bath, gets ready the (following) requisites: a new garment, a mat of erakā-grass, paste for the bath, ointment, flowers, collyrium, **a mirror**, two new garments, a three-stringed amulet, a bamboo-staff and two white shoes. ... The mantras (for the shaving) are the same as those of the shaving (I.18); the shaving also takes place. (Transl. Caland 1922: 29)

He (i.e. the teacher) should invest him with the new garment with the verse: “We clothe, O Soma, this boy” etc. [the mantra is given in full in JGS 1,12]. Then he should salve his eyes, first the left and then the right, with the verse beginning: “With glory me” [Jaiminīya-Saṃhitā 2,2,2]. The three-stringed amulet, which must be made of palāśa-wood if he is desirous of averting evil, he (i.e. the student) fastens to his neck with the formula: “Thou art the one averting evil”, of bilva-wood, if he is desirous of spiritual lustre with the formula: “May I become possessed of spiritual lustre”, of arka-wood, if he is desirous of getting food with the formula: “May I eat food.” With the formula: “Thou art the Gandharva Viśvāvasu; protect thou me, guard thou me” he takes the bamboo staff. He should put on the two shoes with the formula: “You are the leaders, lead me.” First he fastens on the right one. (Transl. Caland 1922: 31)

1.2.3 First shaving of the beard (*godānam*)

The **Jaimini-Gr̥hyasūtra** is the only text where the mirror is expressly mentioned as belonging to the *godāna* (alias *keśāntakaraṇa*) rite. However, it is implied in other descriptions of the *godāna* rite (e.g. in ŚGS 1,28, where it is stated that “the *godānakarman* is identical with the *cūḍākarman*”; see 1.2.4 below).

JGS 1,18 (ed. Caland 1922: 16,9–17,2) ṣoḍaśe godānakaraṇam / tat keśāntakaraṇam ity ācakṣate / cauḷakaraṇena mantrā vyākhyātāḥ / upanayanenādeśanam / ... sarvāṇi lomanakhāni vāpayec chikhāvarjam ity audgāhamāniḥ / uptakeśaḥ snāyāt / ... snānīyena tvacam unmṛdnīte / ... snātvānulepanena kurute / ... srajam ābadhnīte / ... **ādarśo** ‘sīty **ādarśa** ātmānam vīkṣeta / **ādarśo** ‘sy ā mā dr̥śyāsan devamānuṣyā ubhaye śobho ‘si śobhāsam ahaṃ devamānuṣyeṣu roco ‘si rocāsam ahaṃ devamānuṣyeṣv iti / apoddhṛtya srajam ādeśayīta / uktā dharmāḥ saṃvatsareṣu / gaur dakṣiṇā /

In the sixteenth year the *godāna* (finds place), that means: “the cutting of the beard.” The mantras are the same as those used for the tonsure (I.11). The undertaking of the observances is the same as that of the initiation (I.12). Here, however, no new garment is prescribed. He causes to shave off all the hair of his body and to cut his nails, according to Audgāhamāni with the exception of his toplock. When he has been shaved, he should bathe. ... he rubs himself with paste prepared from (the bark of) trees. ... he rubs, after having bathed, his body with ointment. ... he fastens a garland on (his head). With the formula: “Thou art **a mirror (ādarśa)**; may both gods and men look (ādr̥śyāsan, sic!) at me. [Thou art splendid, may I be splendid among gods and men.] Thou art shining, may I shine among gods and men” he should look at himself **in the mirror**. Having taken away the wreath he (i.e. the teacher) should give him directions (to put fuel on the fire etc.). The ordinances (to which the student is subjected) during the years (of the study following after *godāna*) are treated. A cow is the fee. (Transl. Caland 1922: 29)

1.2.4 First tonsure (*cauḷam* or *cūdākaraṇam*)

In the description of the *godāna* rite (see 1.2.3 above), the **Jaimini-Gr̥hyasūtra** (1,18) refers to the rite of first tonsure as the model from which the mantras of the *godāna* are taken. While the mirror does not figure in the *godāna* descriptions of the other Gr̥hyasūtras, in the case of the first tonsure the mirror is found in several texts. In the Jaimini-Gr̥hyasūtra, the rite is described in chapter 1,11:

JGS 1,11 (ed. Caland 1922: 8,16–9,15) *tr̥tīye samvatsare jaṭāḥ kurvīta / ... kṣuram ādatte / ... udakam ādatte / ... dakṣiṇam keśāntam abhyundyāt / ... tasmiṃs tisro darbhapīṇjūlir upadadhāty ekām vā / ... dhārayet / ... ūrdhvaṃ trir ādarśena sprṣtvā yena dhāteti kṣureṇa chindyāt / ... paścāt tathottarataḥ / pratimantram keśāṃś ca darbhapīṇjulīśeṣāṃś cāṇaḍuḥe gomaye 'bhūmisprṣṭe nidadhyaṭ / ...*

In the third year (after the day of birth) he should shape the twisted hair (of his son) (i.e. he should perform the *cūdākarma*) ... he takes up the razor ... He takes the water ... he should moisten the hair near the right ear. In this (hair) he puts three darbha [grass] blades or a single one. He should hold (the hair and the blade in his left hand) with the verse: “Prajāpati hold again and again, for good shaving.” Having touched **with a mirror** thrice (the hairs and the grass blades) in upward direction, he should shave off (some hair together with parts of the blades) by means of the razor, muttering (the three mantras) ... In the same way the back and left side of the head. At each mantra he should deposit the hair and the rest of the darbha blades on bull’s dung, which should not be put on the bare ground ... (Transl. Caland 1922: 16)

The corresponding passage of the **Gobhila-Gr̥hyasūtra** belonging to the Kauthuma school of Sāmaveda reveals that in this rite the mirror has replaced ‘a razor made of the wood of the udumbara fig’ (*audumbaraḥ kṣuraḥ*). In the mantra it is equated with the tusk of Viṣṇu (as a wild boar), a harmless tool used by the boy’s father in a simulated haircut with mantras, which precedes the actual shaving done with a metal razor by a professional barber without mantras. The *gr̥hya* mantras are given in full in a separate collective text called the Sāma-Mantra-Brāhmaṇa (SMB) = Chāndogya-Brāhmaṇa.

GGS 2,9,1 *athātas tr̥tīye varṣe cūdākaraṇam / 2 purastāc chālāyā upalīpte 'gnir upasamāhito bhavati / 3 tatraitāny upakṣiptāni bhavanti / 4 ekaviṃśatir darbhapīṇjulya uṣṇodakakaṃṣa audumbaraḥ kṣura ādarśo vā kṣurapāṇir nāpita iti dakṣiṇataḥ / 5 āṇaḍuḥo gomayaḥ kṣuraḥ sthālīpāko vṛthāpakva ity uttarataḥ / ... 12 dakṣiṇena pāṇināpa ādāya dakṣiṇāṃ kapuṣṇikām undaty ... 13 viṣṇor daṃṣṭro 'sīty audumbaraṃ kṣuram prekṣata ādarśam vā / 14 oṣadhe trāyasvainam iti sapta darbhapīṇjūlir dakṣiṇāyām kapuṣṇikāyām abhiśirogrā nidadhāti / 15 tā vāmenābhigṛhya dakṣiṇena pāṇinaudumbaraṃ kṣuram gr̥hītvā ādarśam vābhinidadhāti svadhite mainam himsīr iti / 16 yena pūṣā brhaspater iti triḥ prāṇcam prohaty apracchindan sakṛd yajuṣā dvis tūṣṇim / 17 athāyasena pracchidyāṇaḍuḥe gomaye nidadhāti / 18 etayaivāvṛtā kapucchalam etayaivottarām kapuṣṇikām /*

1. Now follows the tonsure of the child’s head, in the third year. 2. To the east of the house on a surface besmeared (with cow-dung) wood has been put on fire. 3. There the following things have been placed: 4. To the south (of fire) twenty-one Darbha blades, a brass vessel with hot water, a razor of Udumbara wood or **a mirror**, and a barber with a razor in his hand; 5. To the north, bull’s dung and a mess of boiled rice with sesamum seeds, which may be more or less cooked. ... 12. Drawing water (out of that vessel) with his right hand he moistens the patch of hair on the right side (of the boy’s head) ... 13. With (the Mantra), “Viṣṇu’s tusk art thou” ([SMB I,6,]4) he looks at the razor of Udumbara wood or **at the mirror**. 14. With (the Mantra), “Herb! Protect him!” ([SMB I,6,]5), he puts seven Darbha blades, with their points turned towards (the boy’s) head, into the patch of hair on the right side of his head. 15. Pressing them down with his left hand, and seizing with his right hand the razor of Udumbara wood or **the mirror**, he touches it (the Darbha blades) with the (Mantra), “Axe! Do no harm to him!” ([SMB I,6,]6). 16. With (the Mantra), “With which Pūṣan has shaven Br̥haspati’s head” ([SMB I,6,]7), he moves forward (that razor or **the mirror**) three times towards the east without cutting (the hair); once with the Yajus, twice silently. 17. Then

(the barber) with the razor of metal cuts the hair and throws (the cut off hair ends) on the bull's dung. 18. In the same way (after the same rites have been performed), he cuts the patch of hair on the back-side; 19. And that on the left side. ... (Transl. Oldenberg 1892: II, 60–62)

In the **Khādīra-Gr̥hyasūtra**, which is a later abridgement of the GGS made for the Rāṇyānīya subschool of Sāmaveda, the mirror is already the preferred alternative (being mentioned first) instead of the wooden razor, which is still mentioned (although in second place). Here a more complex earlier act could be replaced (in KhGS 2,3,23) with a simple glance at the mirror, the act naturally expected in the case of that object.

KhGS 2,3,16 tṛtīye varṣe caulam / **17** tatra nāpita uṣṇodakam **ādarśaḥ** kṣuro vaudumbaraḥ piṇjulya iti dakṣiṇataḥ / **18** ānaḍuho gomayaḥ kṛsarasthālīpāko vṛthāpakva ity uttarataḥ / ... **22** āpa ity untte / **23** viṣṇor ity **ādarśam** prekṣetaudumbaraṃ vā / **24** oṣadha iti darbhapiṇjuliḥ saptordhvāgrā abhinidhāya / **25** svadhita ity **ādarśena** kṣureṇaudumbaraṇa vā / **26** yena pūṣeti dakṣiṇatas triḥ prāñcam prohet / **27** sakṛd āyasena pracchidyānaḍuho gomaye keśān kuryād / **28** undanaprabhṛty evaṃ paścād uttarataś ca / ...

16. In the third year the tonsure (of the child's head) is performed). 17. There the barber, warm water, **a mirror**, or a razor of Udumbara-wood, and (Darbha)-blades (are placed) towards the south. 18. A bull's dung and a mess of boiled rice with sesamum seeds which may be more or less cooked, to the north; ... 22. With (the Mantra), "May the waters" ([SMB I,6,]3), he moistens (the boy's hair). 23. With (the Mantra), "Vishṇu's" ([SMB I,6,]4), he should look **at the mirror** or at the razor of Udumbara-wood. 24. With (the Mantra), "Herb!" ([SMB I,6,]5) he puts seven Darbha-blades, with their points upwards (i.e. towards the boy's head?), into (his hair). 25. With (the formula), "Axe!" ([SMB I,6,]6) (he presses them down) **with the mirror** or with the razor of Udumbara-wood. 26. With (the Mantra), "With which Pūshan" ([SMB I,6,]7), he should move forward (the razor) three times towards the east on the right side (of the boy's head).⁶ 27. Cutting (the hair) once with a razor of metal he should throw the hair on the bull's dung. 28. The same rites, beginning from the moistening (of the hair, are repeated) on the left side and on the back side (of the child's head). ... (Transl. Oldenberg 1886: I, 397–399)

All the above three texts belong to the Sāmaveda. In the R̥gvedic **Śāṅkhāyana-Gr̥hyasūtra**, the first tonsure is described in chapter 1,28 (excerpted below). There is a largely identical variant of the ŚGS called the **Kauṣītaki-Gr̥hyasūtra**, where this rite is described in chapter 1,21 with some variant readings; while these are not so important as to warrant a separate treatment, it may be noted that the words *ādarśam* and *ādarśena* occur in Kauṣītaki-Gr̥hyasūtra 1,21,6 and 1,21,11. In the ŚGS and the Kauṣītaki-Gr̥hyasūtra, no reference is made to a wooden razor.

ŚGS 1,28,1 samvatsare cūḍākarma / **2** tṛtīye vā varṣe / ... **5** agnim upasamādhāya / ... **7** ānaḍuham ca gomayaṃ kuśabhittam ca keśapratigrahaṇāyā**ādarśam** navanītam lohakṣuram cottarata upasthāpya / ... **9** ... śitoṣṇābhīr adbhir dakṣiṇam keśapakṣam trir abhyanakti / **10** śalalyaika vijaṭān kṛtvā / **11** navanītenābhyajya / **12** oṣadhe trāyasvainam iti kuśataruṇam antardadhāti / **13** keśān kuśataruṇam **cādarśena** samspṛśya / **14** tejo 'si svadhitiḥ te pitā mainam himsīr iti lohakṣuram ādatte / **15** ... keśāgrāṇi chinatti kuśataruṇam ca / **16** evaṃ dvitīyam evaṃ tṛtīyam / **17** evaṃ dvir uttarataḥ / **18** nikakṣayoḥ ṣaṣṭhasaptame godānakarmaṇi / **19** etad eva godānakarma yac cūḍākarma / **20** ṣoḷaśe varṣe 'ṣṭādaśe vā / ...

After one year the Cūḍākarma (i.e. the tonsure of the child's head); 2. Or in the third year; ... 5. Having placed the fire (in the outer hall; see chap. 5,2) — ... 7. And having put down northwards bull-dung and a layer of Kuśa grass for receiving the hair, **a mirror**, fresh butter, and a razor of copper, ... 9 ... he sprinkles the right part of his hair three times with lukewarm water. 10. Having loosened the tangled lock, according to some (teachers), with a porcupine's quill, 11. And having anointed (his hair) with fresh butter, 12. He puts a young Kuśa shoot among (the hairs) with the words, "Herb, protect him!" 13. Having touched the hair and the Kuśa shoot **with the mirror**, 14.

6 Corrected from Oldenberg's inadvertent translation of 'hair' instead of 'head'.

He takes up the copper razor with the words, “Sharpness art thou; the axe is thy father. Do not harm him!” 15. ... he cuts the tips of the hairs and the Kuśa shoot. 16. In the same way a second time; in the same way a third time. 17. In the same way twice on the left side. 18. Under the armpits a sixth and a seventh time at the Godānakarman (ceremony of shaving the beard). 19. The Godānakarman is identical with the Cūḍākarman. 20. (It is to be performed) in the sixteenth or in the eighteenth year. ... (Transl. Oldenberg 1886: I, 55–57)

While the Sāmavedic texts use the word *darbhapiñjulī* for the grass mixed with hair, the ŚGS here uses the word *kuśataruṇa* ‘tender kuśa blade’, which recurs in ŚGS 4,15,11 as the instrument with which collyrium is applied in the *sarpabali* just before the snakes are made to look in the mirror (see 1.2.7 below).

Other Gṛhyasūtras (e.g. BhGS 1,28; VaikhGS 3,23) do not mention the mirror in their descriptions of the first tonsure and first shaving. In Mānava-Gṛhyasūtra 1,21,3–8, the father or family priest moistens the child’s hair, puts a blade of darbha grass next to the hair, touches the blade and hair with the copper razor, shaves off parts of the hair, hands the razor over to the barber, and then addresses the hair falling to the ground with a mantra. In the Āgniveśya-Gṛhyasūtra (2,2,5), too, only a metal razor is used, and here the barber does not figure at all.

1.2.5 Binding with a protective thread (*kautuka-bandha*)

After the first tonsure (2,2,5), the Āgniveśya-Gṛhyasūtra prescribes the *nāndīmukha-śrāddha*, an offering to the deceased ancestors to be performed in connection with happy family rituals such as marriage (2,3,2–4). Thereafter (in 2,3,5), Āgniveśya prescribes the rite of binding a protective thread (*kautuka-tantu*) around the right arm of a male youth or around the left arm of a maiden. This should be done in all those rites that include the *nāndīmukha-śrāddha* (*yatra nāndīśrāddham tatra kautukam ity āha bhagavān āgniveśyaḥ*). This is the only elaborate description of the ceremony, and the only one to mention a mirror, though other texts occasionally do prescribe the tying of such a protective thread (usually called *pratisara-* or *pratisarā-*) around the wrist or neck⁷ (see Gonda 1937).

ĀgnivGS 2,3,5 (ed. p. 58) *atha kautukam vyākhyāsyāmaḥ / paramasvāmīśarmanah kumārasya kautukabandham kariṣya iti saṅkalpya taṇḍulam udakumbham varāhaviṣāṇam ca kaṇṭakinaṃ ca śaṅkham ādarśam añjanaṃ kautakatantum cādāya ...* (p. 59) *mātulaḥ kumārasya samīpa upaviśya trīṇi śalalyādiśaṅkharantāny ādāya kumārasya dakṣiṇam bāhum anvavahr̥tya triḥ pradakṣiṇam āvartayate / athañjanam ādāya dakṣiṇenāṅkte / ādarśam ādāya mukham darśayati / tantum ādāya ... tantum prabadhya ... rakṣām karoti ...*

Now we shall explain [the rite of tying] the protective thread. After having declared the intention “I shall perform the tying of a protective band for Master Paramasvāmi Śarman”, after having taken [rice] grains, a water pot, a wild boar’s tusk and a porcupine’s quill, a conch shell, **a mirror**, collyrium, and the protective thread ... the maternal uncle seats himself near the boy, takes the three things beginning with the porcupine’s quill and ending with the conch shell [i.e. including the tusk as the third thing], lowers the boy’s right arm and turns it sunwise around three times. Then with his right hand he anoints collyrium [around the boy’s eyes]. He makes [the boy] look at his [i.e. the boy’s own] face **with a mirror**. He takes the thread ... binds the thread [around the boy’s wrist] ... and [therewith] protects him ...

7 Mayrhofer (1992: I, 364) discusses the etymology of Sanskrit *-kutuka-* and *kautuka-*, but only in the meaning ‘desire, curiosity, interest’ (finding it unclear). If *kautuka-* as a ‘protective thread’ was originally tied around the neck, it may go back to Dravidian (Telugu *kuttika*, *kutika*, *kutuka* ‘throat, neck’ and cognates; see Burrow & Emeneau 1984: 157 no. 1718).

1.2.6 Marriage (*vivāha*)

The Āgñiveśya-Gr̥hyasūtra includes the mirror in a rite rarely included in marriage ceremonies:

ĀgnivGS 1,7,1 (p. 40) athātaḥ sthāgaram alaṃkāraṃ vakṣyāmaḥ / **ādarśaṃ** cāñjanam cāhataṃ vāsaḥ sarvasurabhitam vr̥hīn dṛṣadupale ity ete ‘sya sambhārā upakṛtā bhavanti / (p. 41) pāṇigrahaṇād ūrdhvaṃ śvobhūte ... etasmin kāle varasya bhaginy ... sarvasurabhitam piṣṭvā devatābhyo nivedyāñjanenāñkte / **ādarśam** avekṣa(yi)tvā śeṣeṇa duhitaram alaṃkṛtya mukhe “agnir yajurbhiḥ” “senendrasya” iti paścāj jāmātaram (alaṃkaroti) / yac cātra striya āhus tat kurvanti / sā priyā bhavati / *priyo haiva bhavati*- [TB 2,3,10,4] iti brāhmaṇam //

Now we shall describe the *sthāgara alaṃkāra* [marking the foreheads of a newly wedded couple with a fragrant powder called *sthagara*]: **A mirror**, ointment, an unwashed (i.e. new) garment, everything fragrant, rice-grains, the upper and lower mill-stone, these are the necessities ready for this (rite). After the ceremony of the hand-taking (marriage), in the next morning ... At the (same) time the sister of the newly married husband ... having with the upper and lower millstone ... ground everything fragrant and offered (it) to the gods, anoints (them) with ointment. Having made (them) look **at the mirror** and having with the remainder “adorned” the daughter on the face with the mantras (beginning with) “Agni with the yajuh formulas” and “Senā is Indra’s (spouse)” subsequently she “adorns” the son-in-law. And what on this occasion the women say that they do. She becomes dear. “He indeed becomes dear”, thus a *brāhmaṇa*. (Transl. Gonda 1977: 594)

Gonda (1977: 594) notes that this ceremony included in the marriage by Āgñiveśya belongs to “rites that are foreign to the *sūtra* tradition or have at least no parallels in the older *gr̥hya* works”. However, in Gobhila-Gr̥hyasūtra 4,2, pounded *sthagara*, pounded collyrium and sesamum oil are offered to the ancestors at the *anvaṣṭakya* rite. Furthermore, the Taittirīya-Brāhmaṇa not only speaks of the *sthāgara alaṃkāra* rite, but it is also the text quoted by the Āgñiveśya-Gr̥hyasūtra at the end of the above passage: TB 2,3,10,1–4 ... tāsya u hā sthāgarām alaṃkārām kalpayitvā ... priyā haivā bhavati //. That said, neither the GGS nor the TB mentions the mirror.

Chapter 1,12 of the **Śāṅkhāyana-Gr̥hyasūtra** corresponds to the almost identical chapter 1,8 of the **Kauṣṭhiki-Gr̥hyasūtra** (*ādarśam* there in sūtra 1,8,7):

ŚGS 1,12,1 snātam kṛtamaṅgalaṃ varam avidhavāḥ subhagā yuvatyāḥ kumāryai veśma prapādayanti / ... **3** tābhir anujñāto ‘thāsyai vāsaḥ prayacchati *raibhy āsīd* iti / **4** *cittir ā upabarhaṇam* ity āñjanakośam ādatte / **5** *samañjantu viśve devā* iti samañjanīyā / **6** *yatheyaṃ śacīm vāvātām suputrām ca yathāditim* / *avidhavām cāpālām evaṃ tvām iha rakṣatād imam* iti dakṣiṇe pāṇau śalalīm trivṛtam dadāti / **7** *rūpaṃ rūpaṃ* ity **ādarśaṃ** savye /

1. The bridegroom, who has bathed and for whom auspicious ceremonies have been performed, is escorted by happy young women, who are not widows, to the girl’s house. ... 3. having obtained their permission, he then gives her the garment with (the verse), “The Raibhī was” (Rig-veda X, 85,6). 4. With (the verse), “Mind was the cushion” (ibid. 7), he takes up the salve-box. 5. The verse for anointing is, “May the Viśve devās anoint (or, unite),” (ibid. 47). 6. “As this (has protected) Śacī the beloved one, and Adīti the mother of noble sons, and Apālā who was free from widowhood, may it thus protect thee, N.N.!” — with these words (the bridegroom) gives her into her right hand the quill of a porcupine (and) a string of three twisted threads. 7. With the verse, “Shape by shape” (Rig-veda VI, 47,18) **a mirror** into the left. (Transl. Oldenberg 1886: I, 32–33)

The verse with which the mirror is given is given in full as follows. It contains the word *pratirūpa*, which is connected with the mirror in the Upaniṣads (see 1.1.1 above).

RV 6,47,18 rūpaṃ rūpaṃ prātirūpo babhūva tād asya rūpām praticakṣaṇāya /
indro māyābhir pururūpa īyate yuktā hī asya hārayaḥ śatā dāśa //

He has a form corresponding to every form; this form of his is for display.
Indra keeps going about in many forms through his magical powers, for ten hundred fallow bays are yoked for him. (Transl. Jamison & Brereton 2014: II, 837)

The mirror does not figure in the marriage descriptions of the other Gṛhyasūtras. For example, according to Baudhāyana-Gṛhyasūtra 1,1,24, the bride holds an arrow (*iṣu*) in her hand.

1.2.7 Offering to snakes (*sarpabali*) during the *śrāvaṇa* month

The beginning of the rainy season in the *śrāvaṇa* month means an added danger of snakebites, as reptiles are forced to leave their underground burrows when they fill with water. The mirror figures in the **Śāṅkhāyana-Gṛhyasūtra's** description of the snake offering performed on this occasion.⁸ It is nearly identical with that of **Kauṣītaki-Gṛhyasūtra** 4,3 (the word *ādarśena* is found in KauṣGS 4,2,3.) On the word *kuśataruṇa* connecting this passage with ŚGS 1,28 (where a mirror is used during the first tonsure), see 1.2.4 above.

ŚGS 4,15,1 śravaṇam śraviṣṭhīyāyām paurnamāsyām akṣatasaktūnām sthālīpākasya vā juhōti / 2 viṣṇave svāhā śravaṇāya svāhā śrāvānyai paurnamāsyai svāhā varṣābhyah svāheti / 3 gṛhyam agniṃ bāhyata upasamādhāya lājān akṣatasaktūṃś ca sarpiṣā samniniya juhōti / 4 divyānām sarpānām adhipataye svāhā divyebhyah sarpebhyah svāheti / 5 uttareṇāgniṃ prāgagreṣu naveṣu kuśeśūdakumbham navaṃ pratiṣṭhāpya / 6 divyānām sarpānām adhipatir avaneniktām divyāḥ sarpā avanenijatām ity apo ninayati / 7 divyānām sarpānām adhipatiḥ pralikhatām divyāḥ sarpāḥ pralikhatām iti phaṇena ceṣṭayati / 8 divyānām sarpānām adhipatiḥ pralimpatām divyāḥ sarpāḥ pralimpantām iti varṇakasya mātṛā ninayati / 9 divyānām sarpānām adhipatir ābadhnātām divyāḥ sarpā ābadhnātām iti sumanasa upaharati / 10 divyānām sarpānām adhipatir āchādayatām divyāḥ sarpā āchādayantām iti sūtratantum upaharati / 11 divyānām sarpānām adhipatir āṅktām divyāḥ sarpā āṅjatām iti kuśataruṇenopaghātām āñjasya karoti / 12 divyānām sarpānām adhipatir īkṣatām divyāḥ sarpā īkṣantām ity **ādarśeneksayati** / 13 divyānām sarpānām adhipata eṣa te balir divyāḥ sarpā eṣa vo balir iti balim upaharati / 14 evam āntarikṣānām / 15 diśyānām / 16 pāṛthivānām iti / ...

1. The Śravaṇa (oblation) he offers on the full moon day that falls under (the Nakṣatra) Śraviṣṭhās, of the flour of fried barley, or of cooked food, 2. With (the words), “To Viṣṇu svāhā! To (the Nakṣatra) Śravaṇa svāhā! To the rainy season svāhā!” 3. Having established the (sacred) domestic fire outside, and having mixed together fried grain and the flour of fried barley with butter, he sacrifices 4. With (the word), “To the Lord of the celestial Serpents svāhā! To the celestial Serpents svāhā!” 5. Having placed to the north of the fire a new water-pot on eastward-pointed, fresh Kuśa-grass, 6. With (the words), “May the Lord of the celestial Serpents wash himself! May the celestial Serpents wash themselves!” he pours water into it. 7. With (the words), “May the Lord of the celestial Serpents comb himself! May the celestial Serpents comb themselves!” he makes movements with a comb. 8. With (the words), “May the Lord of the celestial Serpents paint himself! May the celestial Serpents paint themselves!” he pours out portions of paint. 9. With (the words), “May the Lord of the celestial Serpents tie (this) to (himself)! May the celestial Serpents tie (this) to (themselves)!” he offers flowers. 10. With (the words), “May the Lord of the celestial Serpents clothe himself! May the celestial Serpents clothe themselves!” he offers a thread. 11. With (the words), “May the Lord of the celestial Serpents anoint (his eyelashes)! May the celestial Serpents anoint (their eyelashes)!” he spurts out (small portions of collyrium) with a young Kuśa shoot. 12. With (the words), “May the Lord of the celestial Serpents look (at himself)! May the celestial Serpents look (at themselves)!” he makes them look **in a mirror**. 13. With (the words), “Lord of the celestial Serpents, this is thy Balī! Celestial Serpents, this is your Balī!” he makes a Balī-offering. 14. In the same way for the aerial (Serpents). 15. For those dwelling in the directions (of the horizon). 16. For the terrestrial ones. ... (Transl. Oldenberg 1886: I, 127–129)

The Mānava-Gṛhyasūtra (2,16,3) is very laconic in prescribing a *bali* offering of unhusked barley to snakes with three verses in the *śrāvaṇa* month. The Gobhila-Gṛhyasūtra in its *śrāvaṇa* chapter (3,7) just prescribes a *bali* offering to each of the four kings of the serpents living in the four cardinal directions (GGs 3,7,13–15). The *śrāvaṇa* chapter (2,1) of the Āśvalāyana-Gṛhyasūtra likewise

⁸ For a thorough study on Indian snake worship, including the *sarpabali*, see Winternitz 1888.

only prescribes a *bali* offering to the terrestrial, aerial and celestial serpents and those that dwell in the cardinal directions. The Hiranyakeśi-Gr̥hyasūtra (2,16) prescribes a *bali* offering to these same four kinds of serpents during the *śrāvaṇa* month; in addition, they are given water, collyrium and ointment. In its *śrāvaṇa* chapter (2,14), the Pāraskara-Gr̥hyasūtra has a more elaborate description of the worship of different kinds of serpents (the terrestrial, aerial and celestial ones belonging to Agni, Vāyu and Sūrya, respectively); they are asked to wash themselves, have their *bali* offering, comb themselves, salve their eyes with collyrium, anoint themselves with ointment, and put on garlands, but they are not asked to look into a mirror.

According to Āpastamba-Gr̥hyasūtra 18,10–12, the *śrāvaṇa bali* offering to the serpents is made in the following way: “he ... goes out in an easterly or northerly direction, prepares a raised surface, draws on it three lines directed towards the east and three towards the north, pours water on the (lines), and lays (an offering of) flour (for the serpents on them, with the [formula of Āpastamba-Mantra-Pāṭha II, 17,8]. Silently (he lays down) unground (?) grain, roasted grain, collyrium, ointment, (the fragrant substance called) Sthagara, and Uśīra root. With the next (formulas, II, 17,9–26) he should worship (the serpents), should sprinkle water round (the oblations), should return (to his house) silently without looking back, should sprinkle (water) a water-pot from left to right, thrice around the house ...” (Transl. Oldenberg 1892: II, 288).

Here, too, the mirror is lacking. Nonetheless, the passage is interesting, as it mentions the rare substance called *stthagara* discussed in 1.2.6 above.

1.2.8 Divination by means of a mirror

As already mentioned in the introduction, the Sāma-Vidhāna alias Sāma-Vidhāna-Brāhmaṇa, in spite of being usually called a “Brāhmaṇa”, is a relatively late text in Sūtra style. It explains how the chants (*sāman*) of the Sāmaveda can be used for “magical” purposes, with the parallel Ṛg-Vidhāna explaining the similar use of Ṛgvedic verses. Both texts include passages with post-Vedic practices, and they have a lot in common with the definitely late Atharvaveda-Parīśiṣṭas (Gonda 1951: 3–5). Though the SVB is supposed to be a Kauthuma text, the verse quoted in the following passage is not found in the Sāmaveda-Saṃhitā of the Kauthuma-Rāṇāyanīya school. However, it is found in the Jaiminīya-Saṃhitā (JS 1,12,9), and the Grāmegeya-Gāna of the Jaiminīya school records two songs (*sāman*) composed upon it, called *agneḥ śraīṣṭhyam* and *ādityasya ruciḥ / rocanam* (JGG 12,15–16).

SVB 3,4,4 kanyām vopavāsayed adṛṣṭarajasam **ādarśam** cāyam agniḥ śreṣṭhatama ity etena /
vyuṣṭāyām rātrāv etenaivābhigīya parimṛjya brūyāt paśyati / paśyati ha /

He should spend the night [awake] with a young girl who has not yet menstruated and with a **mirror**, (addressing them) with (a song composed on) this (verse): “This Fire, the best” (JS 1,12,9). When the night has turned to morning, he should chant (upon the girl and the mirror a *sāman* composed on) this same (verse), polish (the face of the mirror) and say (to the girl): “Look (into the mirror)!” To be sure, she sees (something in the mirror; he should ask her what does she see, and she should reply truthfully).

The verb *pari* + *mṛj*- literally means ‘to wipe (all) around’, denoting also ‘to polish’. As the object of this verb the commentator Sāyaṇa supplies the word *mukham*, which means either ‘mouth’ or ‘face’. My above understanding of this differs from that of Konow (1893: 71), who translates the latter part of this rule thus: “Bei Tagesbruch soll er dasselbe singen, sich den Mund abwischen und zu ihr sagen: ‘sieh (nämlich in die Spiegel)!’ Sie wird sehen.” The

commentator Bharatasvāmin (ed. Sharma 1964: 175, 9–10) also supplies the word *mukham*, but connects it with the girl:

... abhigīya kanyāṃ paśyan gītvā parimṛjya tasyā mukham *ādarśam* paśyati brūyāt / paśyati ha kanyā ādarśe striyaṃ vā / tam sā prcchet / sa tattvaṃ brūyāt //

He should sing looking at the girl, wipe around her mouth [or face], and say to her: “look into the mirror!” To be sure, the girl sees in the mirror a woman or a man. She should question him; he should tell the truth.

1.2.9 Showing the moon to a newborn child

In its short chapter 38, the **Kāthaka-Gr̥hyasūtra** (belonging to the Kāṭha school of the Black Yajurveda) prescribes the *candradarśanam*, which consists of showing the moon to a newborn child. This should take place when two and a half months have passed since the birth. This rite is also described in the Gobhila-Gr̥hyasūtra (2,8,1–7) and its abbreviated variant, the Khādira-Gr̥hyasūtra (2,3,1–5), but the mirror does not figure in these texts.

KGS 38,1 evaṃ candradarśanam / ... **5 prakāśo** dakṣiṇā /

Likewise (i.e. in the way of the rite of showing the sun to the newborn child, prescribed in chapter 37, should be performed) the (rite of) showing the moon.

... 5. The sacrificial gift (to the performer of the rite) is **a mirror**.

In Vedic ritual, the gifts (*dakṣiṇā*) to be given to the performer(s) of a rite are in some relation to the contents or nature of the rite; in this case the gift is obviously used to mirror the moon.

This is the only Vedic occurrence of the word *prakāśa-* with the meaning ‘mirror’ (the commentator Devapāla glosses *prakāśa-* with *ādarśa-*). The word is derived from the verb *pra + kās-* ‘to appear, become manifest, shine forth’, whose causative means ‘to make visible, show, display; illumine’. As noted in the introduction, *prakāśa-* does occur already in early Vedic texts, but with the meaning ‘shine, lustre, fame’.

There is another quite similar early Vedic word, *prākāśá-*, which many scholars have derived from *pra + kās-* and interpreted to denote ‘mirror’. However, the single context where the word *prākāśá-* occurs – *prākāśá-* is given as a gift to the (one or two) *adhvaryu* priest(s) at the *daśapeya* rite of the royal consecration – and especially its synonym *prāvepá-*, recorded as belonging to the chariot equipment, suggest a different meaning and derivation, from early Vedic *prakaśá-* ‘whip-lash’ (see Parpola 2018).

1.3 Discussion of the references

In the introduction, I concluded that there is no reference to mirror in the Saṃhitā-, Brāhmaṇa- and Śrautasūtra texts, which form the early part of Vedic literature. This conclusion is reinforced by the following considerations.

The words denoting ‘mirror’ are represented very unevenly in the later Vedic literature. In the texts of the Taittirīya school of Black Yajurveda, the mirror occurs in one single context only, namely the *samāvartana* (1.2.2), where all texts of this school refer to its use. This rite, signalling graduation from the study of the Veda, marks coming of age, when the youth starting his adult life is provided with auspicious decorations and symbols of his new status. When the young man looks at his face in the *samāvartana* rite, one would expect the accompanying mantra(s) to convey something like the mantras in JGS 1,18 (see 1.2.3 above): “Thou art a

mirror (*ādarśa*); may both gods and men look at me. Thou art splendid, may I be splendid among gods and men. Thou art shining, may I shine among gods and men.” In this context, the Pāraskara-Gr̥hyasūtra with its mantra also calls the mirror *rociṣṇu* ‘shining’, following the Upaniṣad of its own school (BĀU 2,1,9; see 1.1.1 above).

The mirror mantras used by the Taittirīyas during the *samāvartana* are totally different, however. Instead of auspicious content, they contain a sinister reference to the soul’s departure or journey to the god of death. An explanation for the use of these sombre mantras at such an auspicious ceremony as the *samāvartana* is that they have been adopted from an earlier ritual context and an act that resembled looking at a mirror, a ritual belonging to a time when mirrors did not yet exist in the Vedic world.

The earliest Taittirīya source for the relevant mantra *yan me manaḥ parāgataṃ ...* is Taittirīya-Saṃhitā 6,6,7,2. In the Bhāradvāja-Gr̥hyasūtra and the Āpastamba-Mantra-Pāṭha (recording the mantra used in ĀpGS), the corresponding mantra begins *yan me varcaḥ ...*, and there are also other variations in the Taittirīya texts on the *samāvartana*. An early variant is found in the Saṃhitā texts of the other schools of Black Yajurveda (Kāthaka-Saṃhitā 29,2; Maitrāyaṇī-Saṃhitā 4,7,1), as well as in the Brāhmanas of Sāmaveda (Pañcaviṃśa-Brāhmaṇa 1,5,17; Jaiminīya-Brāhmaṇa 1,167): *yan me mano yamaṃ gatam ...* “My mind that hath gone unto Yama [the god of death] or hath not fled away, that, through King Soma we put again into ourselves.” (Transl. Caland 1931: 9)

The original context of these early mantras of the Black Yajurveda (adopted also into the Sāmaveda Brāhmanas and Śrautasūtras) is the looking (*avekṣaṇam*) at the rice-porridge sacred to Soma (*saumya-caru*). This ritual takes place in a Soma sacrifice during the third pressing of *soma*, in the afternoon (Caland & Henry §237b, 1906–1907: 364–365; 2015: 252–253):

At the center of the caru, the Adhvaryu excavates a cavity, and pours the liquid ghee [i.e. melted butter] in it, and gazes in it: if he does not see himself in it, he pours ghee in it in abundance; but this time, if he still does not see his image in it, it means that his life is at its end. According to the Mān[ava]s, this rite is incumbent only upon the sacrificer; according to Kāty[āyana] and the Taitt[irīya]s, except Baudh[āyana], it concerns only the cantors [i.e. the Sāmavedic priests] (see later); nevertheless, a sick [person] can also try the experiment. ... The one who does not see himself in it, sacrificer, cantor or sick, murmurs T[aittirīya-]S[amhitā] VI. 6. 7. 2 = M[aitrāyaṇī-]S[amhitā] IV. 7. 2: “If my mind goes to Yama [the god of death], or if my [mind] has not [yet] left, by the Soma king, we will strengthen it in us.” (Caland & Henry 2015: 252)

In 1.1.2 above, the Saṃhitāyā Upaniṣad (contained in the R̥gvedic Āraṇyakas) records a similar idea connected with seeing one’s image incompletely in a mirror or in water – the latter alternative undoubtedly representing the earlier pre-mirror time.

In the case of the first tonsure (see 1.2.4 above), one can see a gradual change in the ritual taking place. At first the father or family priest himself shaved the hair with a metal razor, using some grass blades to protect the child from possible wounds (ĀgnivGS). Then the father or family priest came to perform the shaving symbolically, using a wooden razor and mantras, leaving the actual shaving with a metal razor to a professional barber. Then the mirror followed as an alternative to the wooden razor (GGS), becoming the primary tool for the symbolic shaving while the wooden razor is mentioned as an alternative (KhGS). Finally, the mirror alone is used for touching the hair and grass blades (JGS). In the ŚGS, the father or family priest follows the original practice, using the metal razor for shaving, yet the touching of the hair and the grass with a mirror appears as an additional element.

In the *sarpabali*, the mirror has been added to the ritual in the ŚGS alone, though the rite is described in many other Gr̥hyasūtras. Similarly, in the early Upaniṣads (see 1.1.1 above), the soul-man (*puruṣa*) in the mirror is clearly a late addition to speculations that earlier involved the “man” in the sun and the “man” in water.

In the contexts of mirror references, the Śāṅkhāyana/Kauṣītaki school of Ṛgveda has the widest distribution, being represented in sections 1.1.1; 1.1.2; 1.2.(3–)4; 1.2.6; 1.2.7. The Chāndogya (Kauthuma-Rāṇāyanīya) school of Sāmaveda is represented in 1.1.1; 1.2.4; 1.2.8; the Jaiminīya school of Sāmaveda in 1.2.2; 1.2.3; 1.2.4; the Vājasaneyi school of White Yajurveda in 1.1.1; 1.2.1; 1.2.2; the Taittirīya school of Black Yajurveda in 1.2.2 (with the aberrant ĀgnivGS alone figuring in 1.2.5 and 1.2.6); the Kaṭha school of Black Yajurveda in 1.1.1; 1.2.9 and the Aitareya school of Ṛgveda in 1.1.2. On the whole, it can be concluded that the mirror had not penetrated throughout the domestic ritual of the Veda, though its spread was considerable.

2. THE ULTIMATE PROVENANCE AND DATE OF VEDIC MIRRORS

Handled round metal mirrors have been excavated from women’s graves at Harappa (Wheeler 1947; 1968: 66–67 & pl. XXV B). The craftsmen of the Indus Civilization (2600–1900 BCE) used an alloy of copper with a high percentage of tin, sometimes combined with lead, to make surfaces that would give these mirrors a high degree of polish (McIntosh 2008: 319). During its urban phase, the Bactria and Margiana Archaeological Complex (BMAC) of southern Central Asia (c.2200–1800 BCE) also had round copper mirrors whose handle often featured an anthropomorphic shape; the Egyptian model of this handle came to Central Asia via Syria (Pottier 1984: 39–40 & figs. 38–39 nos. 265–273).

The extensive Saṃhitā and Brāhmaṇa texts of the Veda do not refer to the mirror at all. This strongly suggests that metal mirrors were not known and used in North India in early Vedic times, from the last quarter of the second millennium BCE onwards. In other words, the Harappan tradition of making mirrors had not continued until Vedic times, but had died out there. It seems likely to me that the later wave of Indo-Aryan speakers, who brought the poetry of the “family books” of the Ṛgveda-Saṃhitā to India, came without mirrors; they probably descended from the Fëdorovo Andronovo nomads of the Asiatic steppes, who came to southern Central Asia during the post-urban phase of the BMAC (see Parpola 2015: 51–144, 295–304).

After the Saṃhitā and Brāhmaṇa texts had come into existence, the word *ākāśa*- ‘mirror’ is suddenly used in several early Upaniṣads and Gr̥hyasūtras. This striking emergence of numerous references in turn suggests that metal mirrors and their manufacture had been imported into North India perhaps some decades before these texts were composed. When and whence did the mirror come? Answers to these questions could also settle in a new way the problem of dating these texts. Even if the absolute date of the import is not established, the absence of mirror references has already made it seem probable that also the Śrautasūtras – with the exception of the late Śrautasūtra of Kātyāyana, according to which the mirror has a round shape – are earlier than the Upaniṣads, which is something that has not been clear so far.

Currently the early Upaniṣads are widely thought to date from about 500 BCE (Jamison & Witzel 1992: 26). Yet Hock (2007: 23) dates the Āraṇyakas, early Upaniṣads and Śrauta- and Gr̥hyasūtras somewhat earlier, to about 700–500 BCE. Olivelle (1998: 6) places the early Upaniṣads in the sixth century BCE, when many relatively large kingdoms and cities started arising along the Ganges (for this, see Erdosy 1995; Allchin 1995: 331). We have seen above that

Upaniṣadic debates took place in the kingdom of Kāśī, probably in the city of Kāśī/Kāśī alias Vārāṇasī (Banaras, Benares), and mirrors are most likely to have spread through such cultural centres. The philosophical debates mentioning the mirror (see 1.1.1 above) are said to have taken place at the court of King Ajātaśatru of Kāśī. This king is mentioned already in Brāhmaṇa texts as a contemporary of Yājñavalkya, who is a central figure in the Śatapatha-Brāhmaṇa (see Witzel 2003: 106–107). The said Ajātaśatru of Kāśī is probably not the Magadhan king Ajātaśatru who ruled in the first half of the fifth century BCE, although that latter Ajātaśatru did add Kāśī to his realm (Brockington 1995: 194–195).

A major historical event that likely brought metal mirrors to northern India around the above dates is the eastern expansion of the Persian Empire. In his campaigns between 545 and 539 BCE, Cyrus annexed to his realm the Indo-Iranian borderlands (the satrapies of Bactria, Sogdiana, Gandhara, Arachosia and Makran), and the Indus Valley (the satrapy of Hindus) followed around 519–518 BCE with Darius (Briant 2002: 38–40, 140). From the late sixth century to the late fourth century BCE, the Persian Empire ruled the entirety of western Asia, Iran and southern Central Asia, exerting strong cultural influence all around, including in India and the steppes of Eurasia.

Cast and cold-formed round metal mirrors with low (c.8%) tin content were part of the Achaemenid culture, and specimens have been found in various parts of the vast empire. The British Museum has in its collections (accession number 1913.1108.110) an Achaemenid bronze mirror from Carchemish (round, diameter 32.74 cm, height with the handle 42.32 cm). An Achaemenid bronze mirror was found in Tomb 213 from Sardis (Dusinberre 2003: 151–152 with fig. 58) and others elsewhere in Turkey (Moyer 2012: 135). Mirrors produced by Achaemenid Persian craftsmen have also been discovered in Egypt (Bresciani 1965: 324). The number of excavated Achaemenid mirrors is nowhere very great, however, and as of this date none have come from India.

Yet, one can hardly doubt that the Achaemenid conquest of the Indus Valley around 518 BCE also brought Persian mirrors there, after which it must have taken at least some decades for the mirror to spread wider to northern India and to initiate their indigenous production there. A similar process has been recognized in the beginnings of the native Indian coinage, though very few Achaemenid coins have been found in India (Allchin 1995: 218–219; Coningham & Young 2015: 402–404); the Old Persian word *karša-* ‘a measure of weight’ survives in the Sanskrit name of the early Indian punch-marked coins, *kārṣāpaṇa*. Another parallel is the introduction of alphabetic script by the Achaemenid administration, with the Aramaic script eventually giving rise to the Kharoṣṭhī and Brāhmī scripts; that the idea of writing came from Persia is reflected in the Sanskrit word *lipi* ‘writing, script’, from Old Persian *dipi-* ‘script, inscription’. In my opinion, the earliest Sanskrit word for ‘mirror’, late Vedic *ādarśa-*, with the preverb *ā-* and the Indo-Aryan verbal root *dr̥ś-/darś-* ‘to see, look’, as a translation loan renders the original Iranian term: the indirectly preserved Old Persian word for ‘mirror’, **ādaina(ka)-*, is derived from the preverb *ā-* + the Iranian verbal root **dai-* ‘to see, look’ (see Rastorgueva & Edel’man 2003: II, 291–296; Tavernier 2007: 437).

How the mirror developed in early historical India from Achaemenid impulses is suggested by the mirror imports of the Eurasian steppe nomads, in whose culture the mirror was an important object. Many bronze mirrors dated between the sixth and third centuries BCE are known from a fair number of sites in the foothills of the South Urals inhabited by Sarmatian nomads, but also in Siberia (Moyer 2012: 122–196, 357–371). These mirrors clearly fall into two groups. The few earlier mirrors are imports from the Near East and Iran of Achaemenid rule; this can be

determined on the basis of their decoration and manufacture, being cold-forged and containing a low percentage (about 8%) of tin. The later mirrors, particularly from the fourth and third centuries BCE, are imports from India, which during the Hellenistic period remained in close contact with the Central Asia of Indo-Greek rule: these mirrors were produced by hot-forging and a high percentage of tin (around 23–24%), a manufacturing technique known from several parts of the Indian subcontinent in the first millennium BCE and from South India between 1000 and 500 BCE. A higher percentage of tin makes the mirror have a smooth silvery polish, which reflects the image better than a mirror with a low percentage of tin; moreover, the extra tin gives better sound to the metal, a quality utilized in the “rattle-mirrors” of Indian origin that have been excavated in the southern Urals and the Altai region (Vassilkov 2010). The city of Bhir Mound in Taxila, founded during the Achaemenid period at the end of the fifth century BCE and almost from the start having Gangetic contacts (Allchin 1995: 131), is the find place of eight bronze vessels and mirrors with more than 20% tin dated to between 300 BCE and 100 CE. (Treister 2013; Ravich & Treister 2015; Srinivasan 2008; 2016; Chatterjee et al. 2015.) The iconography of fourth- and third-century BCE mirrors from the Eurasian steppes definitely proves their Indian origin (Vassilkov 2010).

The Indian mirrors produced from the fourth century BCE onwards already belong to the post-Vedic time when the Indian epics were composed. The Rāmāyaṇa (2,85,7) is the earliest text to attest the occurrence of the Sanskrit word *darpaṇa* ‘mirror’, which occurs frequently in classical Sanskrit literature. It is not found in Vedic texts, excepting the supplementary Atharva-Parīṣiṣṭas (20,1,3; 63,4,9; 67,6,1; 68,2,30 and 70,5,3), which date from post-Vedic times. Another word frequently used in later literature for ‘mirror’, *prakāśa-* (from *pra* + *kāś-* ‘to appear, become manifest, shine forth’, with the causative ‘to make visible, show, display; illumine’), occurs in the Veda only once, in a relatively late passage (38,5) of the Kāthaka-Gr̥hyasūtra (see 1.2.9 above). As already noted in that connection, the word *prākāśa-*, which occurs in one context only in early Vedic texts, is unlikely to mean ‘mirror’ as suggested by many scholars, but appears to come from early Vedic *prakaśa-* ‘whip-lash’ (see Parpola 2018).

My conclusion is that 500 BCE is a fairly certain *terminus post quem* for the late Vedic texts – including the Upaniṣads, the Gr̥hyasūtras, and the Kātyāyana-Śrautasūtra – in which the Sanskrit word *ākāśa-* is copiously attested with the meaning ‘mirror’. It is noteworthy that the Āraṇyakas and the Jaiminīya-Upaniṣad-Brāhmaṇa, which represent a transition from the Brāhmaṇas into the Upaniṣads, do not yet have *ākāśa-* ‘mirror’, while the word *ākāśa-* in its single occurrence in a true Brāhmaṇa text (Taittirīya-Brāhmaṇa 3,12,9,2) does not yet signify ‘mirror’. New things are slow to be adopted in religious rituals, and this appears to be the case also with the *grhya* rites, where the texts of the different schools attest to an uneven use of the mirror. Philosophical debates, on the other hand, tend to be more open to novelties, so the Upaniṣadic evidence should fairly sensitively reflect the reappearance of the mirror in urban North India. Such famous figures as Yājñavalkya and Śākalya, who figure as proponents of the debates, are known already from the Śatapatha-Brāhmaṇa, so the mirror references must have been interpolated into their teachings when the early Upaniṣads were composed, very probably around the beginning of the fifth century BCE.

ABBREVIATIONS OF PRIMARY SOURCES

AiĀ	Aitareya-Āraṇyaka. Text & transl.: Keith 1909.
ĀgnivGS	Āgniveśya-Gṛhyasūtra. Text: Ravi Varma 1940.
ĀpGS	Āpastamba-Gṛhyasūtra. Text: Winternitz 1887; transl.: Oldenberg 1892: II, 247–297.
ĀpMP	Āpastamba-Mantra-Pāṭha. Text: Winternitz 1897.
ĀśvGS	Āśvalāyana-Gṛhyasūtra. Text & transl. into German: Stenzler 1864–1865; transl. into English: Oldenberg 1886: I, 151–259.
BĀU	Bṛhad-Āraṇyaka-Upaniṣad. Text & transl.: Olivelle 1998: 29–165, 487–532.
BGS	Baudhāyana-Gṛhyasūtra. Text: Shama Sastri 1920.
BhGS	Bhāradvāja-Gṛhyasūtra. Text: Salomons 1913.
BŚS	Baudhāyana-Śrautasūtra. Text: Caland 1904–1923; text & transl.: Kashikar 2003.
Chāndogya-Brāhmaṇa	SMB. Text: Bhattacharyya 1958.
ChU	Chāndogya-Upaniṣad. Text & transl.: Olivelle 1998: 166–287, 532–571.
GGs	Gobhila-Gṛhyasūtra. Text: Knauer 1884; Bhattacharya 1936; transl.: Oldenberg 1892: II, 1–132.
HGS	Hiraṇyakeśi-Gṛhyasūtra. Text: Kirste 1889; transl.: Oldenberg 1892: II, 133–246.
JB	Jaiminīya-Brāhmaṇa. Text: Raghu Vira & Lokesh Chandra 1954.
JGG	Jaiminīya-Grāmegeya-Gāna. Text: Bhaṭṭācārya 1976.
JGS	Jaimini-Gṛhyasūtra. Text & transl.: Caland 1922.
JS	Jaiminīya-Saṃhitā. Text: Raghu Vira 1938.
JUB	Jaiminīya-Upaniṣad-Brāhmaṇa. Text & transl.: Oertel 1896.
KauśGS	Kauṣṭhiki-Gṛhyasūtra. Text: Chintamani 1944.
KBU	Kauṣṭhiki-Brāhmaṇa-Upaniṣad = Kauṣṭhiki-Upaniṣad. Text & transl.: Bodewitz 2002; Keith 1908: 16–41; Olivelle 1998: 324–361, 581–596.
KGS	Kāṭhaka-Gṛhyasūtra. Text: Caland 1925.
KhGS	Khādira-Gṛhyasūtra. Text & transl.: Oldenberg 1886: I, 389–435.
KS	Kāṭhaka-Saṃhitā. Text: Schroder 1900–1910.
KŚS	Kātyāyana-Śrautasūtra. Text: Weber 1859; text & transl.: Thite 2006.
KU	Kaṭha-Upaniṣad. Text & transl.: Olivelle 1998: 372–403, 599–611; transl.: Müller 1884: II, 1–24.
MGS	Mānava-Gṛhyasūtra. Text: Knauer 1897; Sastri 1926; transl.: Dresden 1941.
MS	Maitrāyaṇī-Saṃhitā. Text: Schroeder 1881–1886.
PB	Pañcaviṃśa-Brāhmaṇa = Tāṇḍya-Mahā-Brāhmaṇa. Text: Chinnaswami Sastri 1935–1936; transl.: Caland 1931.
PGS	Pāraskara-Gṛhyasūtra. Text: Bākre 1917; transl.: Oldenberg 1886: I, 261–368.
RV	Ṛgveda-Saṃhitā. Text: Van Nooten & Holland 1994; transl.: Jamison & Brereton 2014.
ŚĀ	Śāṅkhāyana-Āraṇyaka. Text: Bhim Dev 1980; transl.: Keith 1908.
ŚB / ŚBM	Śatapatha-Brāhmaṇa (in the Mādhyandina recension). Text: Weber 1855; transl.: Eggeling 1882–1900.
ŚGS	Śāṅkhāyana-Gṛhyasūtra. Text & transl. into German: Oldenberg 1878; transl. into English: Oldenberg 1886: I, 1–150.
SMB	Sāma-Mantra-Brāhmaṇa = Chāndogya-Brāhmaṇa. Text: Bhattacharyya 1958.
SVB	Sāma-Vidhāna-Brāhmaṇa. Text: Sharma 1964; transl. into German: Konow 1893.
TB	Taittirīya-Brāhmaṇa. Text: Goḍbole 1898; text & transl. of TB 3,10–12: Dumont 1951.
TS	Taittirīya-Saṃhitā. Text: Weber 1871–1872; transl.: Keith 1914.
VādhGS	Vādhūla-Gṛhyasūtra. Text: Chaubey 2012.
VaikhGS	Vaikhānasa-Gṛhyasūtra. Text: Caland 1927; transl.: Caland 1929.
VārGS	Vārāha-Gṛhyasūtra. Text: Raghu Vira 1932; transl. into French: Rolland 1971.

REFERENCES

- ALLCHIN, Frank Raymond 1995. *The Archaeology of Early Historic South Asia: The Emergence of Cities and States*. Cambridge: CUP.
- BĀKRE, Mahādeva Gangādhara 1917. *Gṛhya-Sūtra by Pāraskar with Five Commentaries of Karka Upādhyāya, Jayarām, Harihar, Gadādhara and Vishvanāth, as well as Appendices Called Vāpyādi-pratishthā kandikā with Kāmdeva Bhāṣhya Showcha Sūtra, Snāna Sūtra with Harihar Bhāṣhya and Shradha Sūtra with Three Commentaries by Karka, Gadādhara and Shradha Kāshika by Krishnamishra and Bhojana Sūtra*. Bombay: Gujarati Printing Press.
- BENTOR, Yael 1995. On the Symbolism of the Mirror in Indo-Tibetan Consecration Rituals. *Journal of Indian Philosophy* 23: 57–71.
- BHATTĀCĀRYA, Vibhūtibhūṣaṇa 1976. *Jaiminīya Sāmagāna Edited*. (Sarasvatī-Bhavana-Granthamālā 109) Varanasi: Sampurnanand Sanskrit Vishvavidyalaya.
- BHATTACHARYA, Chintamani 1936. *Gobhilaḥgrhyasūtram with Bhaṭṭanārāyaṇa's Commentary Critically Edited from Original Manuscripts with Notes and Indices*. (The Calcutta Sanskrit Series 17) Calcutta: Metropolitan Printing and Publishing House.
- BHATTACHARYA, Durgamohan 1958. *Chāndogya-brāhmaṇa with the Commentaries of Guṇaviṣṇu and Sāyaṇa, Edited*. (Calcutta Sanskrit College Research Series 1) Calcutta: Sanskrit College.
- BHIM DEV 1980. *Śāṅkhāyanāranyakam Critically Edited*. (Vishveshvaranand Indological Series 70) Hoshiarpur: Vishveshvaranand Vedic Research Institute.
- BODEWITZ, Henk 2002. *Kauṣṭhiki Upaniṣad: Translation and Commentary with an Appendix, Śāṅkhāyana Āraṇyaka, IX–XI*. (Groningen Oriental Studies 16) Groningen: Egbert Forsten.
- BÖHTLINGK, Otto & Rudolph ROTH 1852–1875. *Sanskrit-Wörterbuch, I–VII*. St. Petersburg: Kaiserliche Akademie der Wissenschaften.
- BRESCIANI, Edda 1965. Ägypten und Perserreich. In: H. BENGTSON (ed.), *Griechen und Perser* (Fischer Weltgeschichte 5): 311–329. Frankfurt am Main: Fischer.
- BRIANT, Pierre 2002. *From Cyrus to Alexander: A History of the Persian Empire*. Tr. P.T. Daniels. Winona Lake: Eisenbrauns.
- BROCKINGTON, John 1995. Imperial India (500 B.C. – AD 550). In: A. COTTERELL (ed.), *The Penguin Encyclopedia of Classical Civilizations*: 193–236. London: Penguin Books.
- BURROW, Thomas & Murray B. EMENEAU 1984. *A Dravidian Etymological Dictionary*. 2nd edn. Oxford: Clarendon Press.
- CALAND, Willem 1904–1923. *Baudhāyana Śrauta Sūtra Belonging to the Taittirīya Saṃhitā Edited, I–III*. (Bibliotheca Indica, Work 163) Calcutta: The Asiatic Society.
- CALAND, Willem 1922. *The Jaiminigrhyasūtra Belonging to the Sāmaveda with Extracts from the Commentary [of Śrīnivāsa] Edited with an Introduction and Translated for the First Time into English*. (The Punjab Sanskrit Series 2) Lahore: The Punjab Sanskrit Book Depot.
- CALAND, Willem 1925. *The Kathakagrhyasutra, with Extracts from Three Commentaries, an Appendix and Indexes, Edited for the First Time*. (Śrīmaddayānanda Mahāvidyālaya Saṃskṛtagranthamālā 9) Lahore: Research Department, D.A.V. College.
- CALAND, Willem 1927. *Vaikhānasa-smārtasūtram: The Domestic Rules of the Vaikhānasa School Belonging to the Black Yajurveda Critically Edited*. (Bibliotheca Indica, Work 242) Calcutta: The Asiatic Society of Bengal.
- CALAND, Willem 1929. *Vaikhānasa-smārtasūtram: The Domestic Rules and Sacred Laws of the Vaikhānasa School Belonging to the Black Yajurveda Translated*. (Bibliotheca Indica, Work 251) Calcutta: The Asiatic Society of Bengal.
- CALAND, Willem 1931. *Pañcaviṃśa-Brāhmaṇa: The Brāhmaṇa of Twenty-Five Chapters Translated*. (Bibliotheca Indica, Work 255) Calcutta: The Asiatic Society of Bengal.
- CALAND, Willem & Victor HENRY 1906–1907. *L'agniṣṭoma: Description complète de la forme normale du sacrifice de soma dans le culte védique, I–II*. Paris: Ernest Leroux.
- CALAND, Willem & Victor HENRY 2015. *Agniṣṭoma: Complete Description of the Normal Form of Soma Sacrifice in the Vedic Cult, I–II*. Translated from the French into English by Ganesh Umakant Thite & Shree Daptardar-Kelkar. Pune: Bhandarkar Oriental Research Institute.

- CHATTERJEE, Shoumita, Sabikun NAHER & Pranab K. CHATTOPADHYAY 2015. Mirrors of Ancient India: From Harappa to Mahasthangarh. *Purātattva* 45: 165–177 & pls. 18–19.
- CHAUBEY, Braj Bihari 2012. *Vādhūlagrhyasūtram with Vṛtti, Accompanied with Some Prayoga and Kārikā Texts, Critically Edited with Introduction and Various Indices*. New Delhi: National Mission for Manuscripts and New Bhartiya Book Corporation.
- CHINNASWAMI SASTRI, A. (II: & Paṭṭābhīrāma ŚĀSTRĪ) 1935–1936. *The Tāṇḍyamahābrāhmaṇa Belonging to the Sāma Veda with the Commentary of Sāyaṇāchārya, Edited with Notes, Introduction, etc.*, I–II. (The Kashi Sanskrit Series 105) Benares: The Chowkhamba Sanskrit Series Office.
- CHINTAMANI, T.R. 1944. *The Kauṣītaka Grhyasūtras*. (Madras University Sanskrit Series 15) Madras: University of Madras.
- CONINGHAM, Robin & Ruth YOUNG 2015. *The Archaeology of South Asia: From Indus to Asoka, c. 6500 BCE–200 CE*. Cambridge: CUP.
- DRESDEN, Mark J. 1941. *Mānavagrhyasūtra: A Vedic Manual of Domestic Rites. Translation, Commentary and Preface*. (PhD dissertation, Utrecht) Groningen: B.J. Wolters.
- DUMONT, Paul-Emile 1951. The Special Kinds of Agnicayana (or Special Methods of Building the Fire-Altar) According to the Kaṭhas in the Taittirīya-Brāhmaṇa: The Tenth, Eleventh, and Twelfth Prapāthakas of the Third Kāṇḍa of the Taittirīya-Brāhmaṇa with Translation. *Proceedings of the American Philosophical Society* 96(6): 628–675.
- DUSINBERRE, Elspeth R.M. 2003. *Aspects of Empire in Achaemenid Sardis*. Cambridge: CUP.
- EGGELING, Julius 1882–1900. *The Śatapatha-Brāhmaṇa According to the Text of the Mādhyandina School Translated*, I–V. (Sacred Books of the East 12, 26, 41, 43, 44.) Oxford: Clarendon Press.
- ERDOSY, George 1995. City States of North India and Pakistan at the Time of the Buddha. In: F.R. ALLCHIN, *The Archaeology of Early Historic South Asia: The Emergence of Cities and States*: 99–122. Cambridge: CUP.
- FUJII, Masato 2004. *The Jaiminīya-Upaniṣad-Brāhmaṇa: A Study of the Earliest Upaniṣad, Belonging to the Jaiminīya Sāmaveda*. (Publications of the Institute for Asian and African Studies 4) (PhD dissertation, University of Helsinki) Helsinki: University of Helsinki.
- GODBOLE, Nārāyaṇa Śāstrī (ed.) 1898. *Kṛṣṇayajurvedīyaṃ taittirīyabrāhmaṇam, śrīmatsāyaṇācāryaviracitabhāṣya-sametam*, I–III. (Ānandāśrama-saṃskṛta-granthāvalīḥ 37) Poona: Ānandāśrama Press.
- GONDA, Jan 1937. Altind. *pratisara-, sraja-* und Verwandtes. *Acta Orientalia* 15: 311–328.
- GONDA, Jan 1951. *The R̥gvidhāna: English Translation with an Introduction and Notes*. Utrecht: N.V.A. Oosthoek's Uitgevers Mij.
- GONDA, Jan 1975. *Vedic Literature (Saṃhitās and Brāhmaṇas)*. (A History of Indian Literature I: 1) Wiesbaden: Harrassowitz.
- GONDA, Jan 1977. *The Ritual Sūtras*. (A History of Indian Literature I: 2) Wiesbaden: Harrassowitz.
- GONDA, Jan 1980. *Vedic Ritual: The Non-Solemn Rites*. (Handbuch der Orientalistik 2.4.1) Leiden: Brill.
- HOCK, Hans Henrich 2007. *An Early Upaniṣadic Reader. With Notes, Glossary, and an Appendix of Related Vedic Texts*. Delhi: Motilal Banarsidass.
- JAMISON, Stephanie W. & Michael WITZEL 1992. *Vedic Hinduism*. Cambridge, MA: the authors.
- JAMISON, Stephanie W. & Joel P. BRERETON, 2014. *The R̥gveda: The Earliest Religious Poetry of India Translated*, 1–3. NY: OUP.
- KASHIKAR, Chintamani G. 2003. *Baudhāyana Śrauta Sūtra Critically Edited and Translated*, I–IV. (Kalāmūlāsāstra Series 35–38) New Delhi: Indira Gandhi National Centre for the Arts.
- KEITH, Arthur Berriedale 1908. *The Śāṅkhāyana Āraṇyaka, with an Appendix on the Mahāvṛata*. (Oriental Translation Fund, New Series 18) London: The Royal Asiatic Society.
- KEITH, Arthur Berriedale 1909. *The Aitareya Āraṇyaka, Edited from the Manuscripts in the India Office and the Library of the Royal Asiatic Society, with Introduction, Translation, Notes, Indexes and an Appendix containing the Portion hitherto Unpublished of the Śāṅkhāyana Āraṇyaka*. (Anecdota Oxoniensia, Aryan Series 9) Oxford: Clarendon Press.
- KEITH, Arthur Berriedale 1914. *The Veda of the Black Yajus School Entitled Taittirīya Saṃhitā Translated*, I–II. (Harvard Oriental Series 18–19) Cambridge, MA: HUP.
- KIRSTE, Johann 1889. *The Grihyasūtra of Hiranyakeśin with Extracts from the Commentary of Māṇḍikātaka Edited*. Vienna: Alfred Hölder.

- KNAUER, Friedrich 1884. *Das Gobhila-grhyasūtra (text nebst einleitung)*. Dorpat: C. Mattiesen.
- KNAUER, Friedrich 1897. *Das Mānava-Grhya-Sūtra nebst Commentar in kurzer Fassung herausgegeben*. St. Petersburg: L'Académie Impériale des Sciences.
- KONOW, Sten 1893. *Das Sāmavidhānabrāhmaṇa, ein altindisches Handbuch der Zauberei, eingeleitet und übersetzt*. Halle a. S.: Max Niemeyer.
- MACDONELL, Arthur Anthony & Arthur Berriedale KEITH 1912. *Vedic Index of Names and Subjects*, I–II. London: John Murray.
- MCINTOSH, Jane R. 2008. *The Ancient Indus Valley: New Perspectives*. Santa Barbara: ABC-CLIO.
- MAYRHOFER, Manfred 1992–2001. *Etymologisches Wörterbuch des Altindiarischen*, I–III. Heidelberg: Universitätsverlag Carl Winter.
- MEYER, Johann J. 1937. *Trilogie altindischer Mächte und Feste der Vegetation*. Zürich: Max Niehans.
- MONIER-WILLIAMS, Monier 1899. *A Sanskrit-English Dictionary, Etymologically Arranged with Special Reference to Cognate Indo-European Languages*. New edition. Oxford: Clarendon Press.
- MOYER, Alexandra Caroline 2012. *Deep Reflection: An Archaeological Analysis of Mirrors in Iron Age Eurasia*. (PhD dissertation, University of Minnesota) Minneapolis.
- MÜLLER, F. Max 1879–1884. *The Upanishads Translated*, I–II. (The Sacred Books of the East 1 & 15) Oxford: Clarendon Press.
- NAMPŪTIRI, Veṅkṛappillī Maṭhattil Illattu Sōmayājippāṭu Mahan Vāsudevan 1978. *Bādhūlakaccāṇṇu, ellāvarkkuṁ āvaśyamāya muhūrtaṇṇaḷuṁ, nimittaprāyaścittaṇṇaḷuṁ, āśaucaṇṇaḷuṁ aṭaṇṇiyatu*. Kunnamkulam: Pañcāṅgaṁ Prassu.
- NAUDOU, Jean 1966. Symbolisme du miroir dans l'Inde. *Arts Asiatiques* 13: 59–82.
- OERTEL, Hanns 1896. The Jāiminīya or Talavakāra Upaniṣad Brāhmaṇa: Text, Translation, and Notes. *Journal of the American Oriental Society* 16: 79–260.
- OLDENBERG, Hermann 1878. Das Čāṅkhāyanagrīhyam. *Indische Studien* 15: 1–166 & 456–483.
- OLDENBERG, Hermann 1886–1892. *The Grihya-Sūtras: Rules of Vedic Domestic Ceremonies Translated*, I–II. (The Sacred Books of the East 29–30) Oxford: Clarendon Press.
- OLIVELLE, Patrick 1998. *The Early Upaniṣads: Annotated Text and Translation*. NY: OUP.
- PARPOLA, Asko 1994. On the Formation of the Mīmāṃsā and the Problems Concerning Jaimini, with Particular Reference to the Teacher Quotations and the Vedic Schools. (Part II) *Wiener Zeitschrift für die Kunde Südasiens* 38: 293–308.
- PARPOLA, Asko 2015. *The Roots of Hinduism: The Early Aryans and the Indus Civilization*. NY: OUP.
- PARPOLA, Asko 2018. Vedic *prākāśā-* = *prāvepā-*: 'metal mirror' or 'ear-drop' – or rather 'whip'? In: M.F. AL'BEDIL' & N.A. YANCHEVSKAYA (eds), *Mitrasampradānam: Sbornik nauchnykh statej k 75-letiju Jaroslova Vladimirovicha Vasil'kova*: 65–92. St. Petersburg: Muzej antropologii i etnografii im. Petra Velikogo (Kunstkamera), Rossijskaya Akademiya Nauk.
- POTTIER, Marie-Hélène 1984. *Matériel funéraire de la Bactriane méridionale de l'Âge du Bronze*. Dessins de Guy Samoun. (Recherche sur les Civilisations, Mémoire 36) Paris: Éditions Recherche sur les Civilisations.
- RAGHU VIRA 1932. *Vārāha-grhya-sūtra with Short Extracts from the Paddhatis of Gaṅgādhara & Vasiṣṭha Critically Edited*. (Panjab University Oriental Publications 17) Lahore: The University of the Panjab.
- RAGHU VIRA (ed.) 1938. *Sāma Veda of the Jaiminiyas*. (Sarasvati Vihara Series 3) Lahore: The International Academy of Indian Culture.
- RAGHU VIRA & LOKESH CHANDRA 1954. *Jaiminiya-Brahmana of the Samaveda: Complete Text Critically Edited for the First Time*. (Sarasvati-Vihara Series 31) Nagpur: International Academy of Indian Culture.
- RANADE, H.G. 2006. *Illustrated Dictionary of Vedic Rituals*. New Delhi: Indira Gandhi National Centre for the Arts & Aryan Books International.
- RASTORGUEVA, Vera S. & Dzhoj I. EDEL'MAN 2003. *Ètimologičeskij slovar' iranskikh yazikov*, II. Moscow: Izdatel'skaya firma "Vostochnaya literatura" RAN.

- RAVICH, Irina & Mikhail TREISTER 2015. The Mirrors of Early Nomads of the Foothills of South Urals: A Complex Archaeo-Technological Study. In: A. HAUPTMANN & D. MODARRESSI-TEHRANI (eds), *Archaeometallurgy in Europe, II: Proceedings of the 3rd International Conference, Deutsches Bergbau-Museum Bochum, June 29 – July 1, 2011* (Der Anschnitt: Zeitschrift für Kunst und Kultur im Bergbau, Beiheft 26): 211–220. Bochum: Deutsches Bergbau-Museum Bochum.
- RAVI VARMA, L.A. 1940. *Āgñiveśyagrhyasūtra Edited*. (Trivandrum Sanskrit Series 144) Trivandrum: University of Travancore.
- ROLLAND, Pierre 1971. *Un rituel domestique védique: Le Vārāhagrhyasūtra traduit et annoté*. Aix-en-Provence: Publications universitaires de lettres et sciences humaines d'Aix-en-Provence.
- SALOMONS, Henriette Johanna Wilhelmina 1913. *Bhāradvājagrhyasūtram: Het hindoesche huisritueel volgens de school van Bhāradvāja*. (PhD dissertation, Utrecht) Leiden: Brill.
- SASTRI, Ramakrishna Harshaji 1926. *Mānavagrhyasūtra of the Maitrāyaṇīya śākhā with the Commentary of Aṣṭāvakra, Edited with an Introduction, Indexes, etc.* (Gaekwad Oriental Series 35) Baroda: Central Library.
- SCHROEDER, Leopold von 1881–1886. *Māitrāyaṇī Saṃhitā herausgegeben*, I–IV. Leipzig: Deutsche Morgenländische Gesellschaft.
- SCHROEDER, Leopold von 1900–1910. *Kāṭhakam: Die Saṃhitā der Kaṭha-çākhā herausgegeben*, I–III. Leipzig: Deutsche Morgenländische Gesellschaft.
- SHAMA SASTRI, R. 1920. *The Bodhāyana-grihya-sūtra Edited*. (Bibliotheca Sanskrita 32/55) Mysore: Government Branch Press.
- SHARMA, Bellikoth R. 1964. *Sāmavidhāna Brāhmaṇa with Vedārthaprakāśa of Sāyaṇa and Padārthamātravivṛti of Bharatasvāmin Critically Edited*. (Kendriya Sanskrit Vidyapeetha Series 1) Tirupati: Kendriya Sanskrit Vidyapeetha.
- SRINIVASAN, Sharada 2008. Mirrors: Metal Mirrors from India. In: H. SELIN (ed.), *Encyclopaedia of the History of Science, Technology and Medicine in Non-Western Countries: 1699–1707*. Berlin: Springer.
- SRINIVASAN, Sharada 2016. Indian High-Tin Bronzes and the Grecian and Persian World. *Indian Journal of History of Science* 51(4): 601–612.
- STENZLER, Adolf F. 1864–1865. *Grhyasūtrāṇi / Indische Hausregeln, Sanskrit und Deutsch*, I: *Āçvalāyana*, 1: *Text*; 2: *Uebersetzung*. (Abhandlungen der Deutschen Morgenländischen Gesellschaft III: 4 & IV: 1) Leipzig: Deutsche Morgenländische Gesellschaft.
- TAVERNIER, Jan 2007. *Iranica in the Achaemenid Period (ca. 550–330 B.C.): Lexicon of Old Iranian Proper Names and Loanwords, Attested in Non-Iranian Texts*. (Orientalia Lovanensia Analecta 158) Leuven: Peeters.
- THITE, Ganesh Umakant 2006. *Kātyāyana-Śrautasūtra: Text with English Translation and Notes*, I–II. Delhi: New Bharatiya Book Corporation.
- TREISTER, Mikhail 2013. Bronzespiegel aus dem südlichen Uralvorland: Nahöstliche und südasatische Importe und lokale Nachahmungen. In: M. TREISTER & L. YABLONSKY (eds), *Einflüsse der achämenidischen Kultur im südlichen Uralvorland (5.–3. Jh. v Chr.)*, I: 143–157. Wien: Phoibos-Verlag.
- TURNER, Ralph L. 1966. *A Comparative Dictionary of the Indo-Aryan Languages*. London: OUP.
- VAN Nooten, Barend A. & Gary B. HOLLAND 1994. *Rig Veda: A Metrically Restored Text with an Introduction and Notes Edited*. (Harvard Oriental Series 50) Cambridge: The Department of Sanskrit and Indian Studies, Harvard University.
- VASSILKOV, Yaroslav V. 2010. Pre-Mauryan “Rattle-Mirrors” with Artistic Designs from Scythian Burial Mounds of the Altai Region in the Light of Sanskrit Sources. *Electronic Journal of Vedic Studies* 17(3): 1–25.
- WAYMAN, Alex 1974. The Mirrors as a Pan-Buddhist Metaphor-Simile. *History of Religions* 13: 251–269. Reprinted in: *Buddhist Insight: Essays by Alex Wayman, Edited with an Introduction by George Elder* (Buddhist Tradition Series 7): 129–152. Delhi: Motilal Banarsidass, 1984.
- WEBER, Albrecht 1855. *The Çatapatha-Brāhmaṇa in the Mādhyandina-çākhā with Extracts from the Commentaries of Sāyaṇa, Harasvāmin and Dvivedaganga, Edited*. (The White Yajurveda 2) Berlin: Ferd. Dümmler's Verlagsbuchhandlung.
- WEBER, Albrecht 1859. *The Çrautasūtra of Kātyāyana with Extracts from the Commentaries of Karka and Yājñikadeva Edited*. (The White Yajurveda 3) Berlin: Ferd. Dümmler's Verlagsbuchhandlung.

- WEBER, Albrecht 1871–1872. *Die Taittirīya-Saṃhitā herausgegeben*, I–II. (Indische Studien 11–12) Leipzig: F.A. Brockhaus.
- WHEELER, Mortimer 1947. Harappa 1946: The Defences and Cemetery R 37. *Ancient India* 3: 58–130 & pl. XV–LX.
- WHEELER, Mortimer 1968. *The Indus Civilization*. 3rd edn. Cambridge: CUP.
- WINTERNITZ, Moriz 1887. *The Āpastambīya Gṛihyasūtra with Extracts from the Commentaries of Haradatta and Sudarśanārya Edited*. Wien: Alfred Hölder.
- WINTERNITZ, Moriz 1888. Der Sarpabali, ein altindischer Schlangenkult. *Mittheilungen der Anthropologischen Gesellschaft in Wien* 18 (Neue Folge 8): 25–52, 250–264.
- WINTERNITZ, Moriz 1897. *The Mantrapāṭha or The Prayer Book of the Āpastambins Edited Together with the Commentary of Haradatta and Translated*. First part: *Introduction, Sanskrit text, Varietas Lectionis, and Appendices*. (Anecdota Oxonensia, Aryan Series 8) Oxford: Clarendon Press.
- WITZEL, Michael 2003. Yājñavalkya as Ritualist and Philosopher, and his Personal Language. In: S. ADAMI (ed.), *Paitimāna: Essays in Iranian, Indo-European, and Indian Studies in Honor of Hanns-Peter Schmidt*, I: 103–143. Costa Mesa: Mazda Publishers.

CORRIGENDA

THE MIRROR IN VEDIC INDIA: ITS ANCIENT USE AND ITS PRESENT RELEVANCE IN DATING TEXTS

Asko Parpola

Studia Orientalia Electronica 7: 1–29. doi: 10.23993/store.76275. Published 1 March 2019.

Corrigenda

Replace *ākāśa-* with *ādarśa-*:

p. 3, line 14 from bottom

p. 4, line 12 from bottom

p. 21, line 14 from bottom

p. 23, lines 10 and 12 from bottom